An Appraisal of Naturalism in Contemporary Meta-Ethics

Thesis

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An Appraisal of Naturalism in Contemporary Meta-Ethics

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B.S., Gordon College

Thesis submitted for the degree of Ph.D. in philosophy (ethics)

on 28 February 1998.

Sponsored by the Whitefield Institute, Oxford.

AWARDING BODY:
THE OPEN UNIVERSITY

Date of award: 7th September 1998

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Dedication

To our friends who comprised 'The Recreators',

with whom the inspiration for this thesis was given its first expression

Hold thou the good: define it well;
For fear divine Philosophy
Should push beyond her mark...

-Tennyson, *In Memoriam*, liii.

Acknowledgments

My deepest and foremost gratitude is extended to my wife April, for constant patience and frequent extended discussions on nearly all the significant points in this thesis. I thank also my supervisors: David Cook of Green College, Oxford, and Sam Berry of University College London. For the help provided by others, most significantly Kate Rawles of Lancaster University, I am greatly appreciative. Other philosophers and scientists who have taken time to read and discuss portions of this or earlier drafts are Roger Crisp of St. Anne's College, Oxford; Jimmy Lenman of Lancaster University; Felicity McCutcheon, Visiting Fellow at Christ Church College, Oxford; Holmes Rolston III of Colorado State University; and Michael Ruse of University of Guelph. Each has contributed to the improvement of this dissertation, although any remaining shortcomings are exclusively my own. For helpful discussions I am thankful to Caroline King, formerly Visiting Fellow at St. Cross College, Oxford; and Roger Trigg of the University of Warwick.

My appreciation must also be mentioned for the teachers and trainers who are responsible for cultivating in me much of what was necessary to conceive and complete this thesis. For fanning a spark of interest in philosophy I didn't know I had, I thank David Cook again, and David Aiken

of Gordon College. For my scientific training I am grateful to Richard Wright of Gordon College, together with the others who were at the biology department there and at Au Sable Institute in Michigan during 1990-93. Lastly, for raising me, teaching me, and providing for me so that I could have all of these experiences and opportunities, I thank my parents Ben and Jean Lahti.

An Appraisal of Naturalism in Contemporary Meta-Ethics

Thesis Abstract

The view that ethics is a discipline which can operate within the constraints of naturalism, whereby all principles, properties and terms are accessible to natural science, can be subdivided into logical, semantic, *and* synthetic. Logical naturalists *defend the naturalist claim with an appeal to the validity of the logical progression from premises without moral terms to conclusions with them.* Semantic naturalists *defend it with an appeal to an analytical equivalence between certain nonmoral and moral expressions. Both of these approaches have been thoroughly criticised in this century. Relatively recently, naturalists have begun to defend their naturalist thesis not from either of these perspectives, but with a direct appeal to synthetic facts which can be employed or referred to in scientific explanations. Effective critique of naturalist theories of this newer type involves examination of both the scientific and the ethical claims made. One such* synthetic naturalist *approach to ethics is the evolutionary naturalism proposed by Michael Ruse. Critique based on a thorough examination of both the science of sociobiology and the moral philosophy involved in Ruse's theory yields informative conclusions, rendering his theory implausible from*

both perspectives. In light of this case study, a general strategy of argument can be developed which has potential for critique of other naturalistic ethical theories as well. This strategy is the Argument from Moral Experience, which operates by comparing descriptive claims regarding the fundamental nature of morality that are presented or implied by ethical theories, with the fundamental nature of morality as it is actually experienced. If arguments of this type are sound, they can be used in an exploration of whether or not naturalism is an appropriate perspective for morality to be understood and explained properly.

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David Christopher Lahti

INTRODUCTION[1]

In the beginning of the seventeenth century Sir Francis Bacon mourned that science in his time was so embryonic that it could not even distinguish between what is good to wish for in life and what is not; but he spoke of a future where a complete science would remedy this situation.[2] Thirty years later, René Descartes, delighted with recent scientific discoveries, was led to assert that 'all things, to the knowledge of which man is competent, are mutually connected in the same way', and so the same method is sufficient for understanding everything we are able to understand.[3] He wrote of 'morals' as one of the most important areas that would someday be elucidated by the growing science.[4] Towards the end of that century, John Locke too came to the conclusion that the new science would provide the keys for understanding morality, and explained something of what the new scientific ethics might look like when it was developed.[5]

The idea of 'science' has certainly been scrutinised and heavily debated since those early modern years. Some of today's prominent scientists and philosophers hold ideas about the nature of science which are

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[1]Cross-referencing in this thesis follows the following rule: capitalised Roman numerals refer to chapters, capitalised letters to sections, and Arabic numerals and lower-case letters to subsections. (E.g. 'see IV.B.3a').
[2]Bacon (1603), Preface.
[3]Descartes (1637), 16.
[4]ibid., 22.
[5]The general belief is asserted in Locke (1689), IV.iii.18-20; the outline of his ethical theory is proposed in II.xxi.31-47.

very different from those of the early pioneers;[6] whilst others describe the significant and meaningful continuity which has been maintained through the centuries.[7] Whatever the relationship between the science of Bacon's day and that of our own, we are nearing four hundred years since the first of the confident prophecies above, and it may be interesting today to discuss the same issue in our own terms. Can science (however it might be understood today) provide all the raw materials which ethics requires in order to describe morality?[8] This thesis will be an examination of this question and a contribution to the search for an answer.

Such an exploration could only be helpful, however, if it is sensitive to the historical backdrop of such questions at this point in the history of philosophy. We are presently at the end of a century during which this type of question has been asked and answered by a great number of philosophers. Sensitivity to this history will affect at least two aspects of an exploration in this area: the terminology used, and the arguments presented.

A. Terminology

The Cambridge philosopher G. E. Moore sought to pin a label on a certain group of those who believed that science could provide the key to understanding morality. In his seminal work *Principia Ethica* he elaborated upon their view, which he held to be erroneous:

> 'Ethics is an empirical or positive science: its conclusions could be all established by means of empirical observation

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[6]See Feyerabend (1995) for an account of the divergence of modern philosophy of science from the prominent seventeenth century thinkers. More specifically, Pickering (1992) documents some recent arguments against the early notion of science being an activity of 'reading from nature'.

[7]e.g. Stephen Hawking (1993), Preface; and Peter Medawar (1984).

[8]In this thesis (except when representing the ideas of others), 'ethics' will be synonymous with 'moral philosophy', or the philosophical enquiry into morality and moral issues, whereas 'morality' will be used for the actual process or capacity of contemplating moral issues and making moral decisions.

> and induction... This method consists in substituting for "good" some one property of a natural object or of a collection of natural objects; and in thus replacing Ethics by some one of the natural sciences... By "nature", then, I do mean and have meant that which is the subject-matter of the natural sciences and also of psychology.'[9]

Moore therefore concluded that the concept of 'natural sciences', and thus 'nature', was central to this view, so he categorised it as 'naturalism'.[10] For Moore, and for many philosophers before and since who have used the term, 'naturalism' means other things in addition to the bare notion that science provides the necessary raw materials for doing ethics; some of these are implied in this very passage.[11] But this one root aspect of his understanding of 'naturalism' does by itself provide a safe and appropriately inclusive understanding of the term, in the opinions of several who claim to be providing overviews of modern philosophy. For instance, *The Oxford Companion to Philosophy* describes naturalism in general as dependent on the 'natural',[12] which is defined as 'accessible to investigation by the natural sciences'.[13] When applied to ethics, then, naturalism becomes the idea that any ethical property or term is 'one that can be employed or referred to in natural scientific explanations.'[14] In a detailed history of naturalism, Philip Kitcher describes it as the attempt to use 'science to address the great questions of epistemology and ethics'.[15] 'Towards *Fin de Siécle* Ethics:

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[9]Moore (1903), 39-40.

[10]ibid. Unless otherwise stated, 'naturalism' in this thesis will be assumed to be applying to ethics alone (*ethical naturalism*). Other applications exist, the most common being *epistemological naturalism* (see Kitcher (1992)) and *metaphysical naturalism* (see Papineau (1993)).

[11]For example, neither the claim that the term 'good' must be substituted by a natural property, nor the claim that ethics is substituted by a single natural science, is entailed by the idea that science encompasses ethics. With respect to the former claim, one could believe that science renders ethics ungrounded in any properties. With respect to the latter, one could believe that ethics is not encompassed by a single science but is a field which incorporates the conclusions of many sciences.

[12]Lacey (1995a), 604.

[13]Lacey (1995), 603.

[14]Crisp (1995), 606.

[15]Kitcher (1992), 53. The relationship between epistemological and ethical naturalism is dealt with briefly in I.A, and I.B.2a.

Some Trends', another comprehensive paper which describes and assesses twentieth-century approaches to ethics, assumes this understanding of the concept as well.[16]

On this understanding of naturalism, the term is defined with respect to science. Another way of defining 'naturalism' is for 'nature' to be the fundamental idea instead, such that 'naturalism is something to do with nature'.[17] This route might be better because it does not beg any questions about the content of nature or the extent of its accessibility to science, for the term 'nature' admits of a great latitude of interpretation. In fact, one study (and this before the bulk of this century's debate on naturalism!) distinguished thirty-nine definitions of 'nature', twenty-seven of them explicitly normative in a way relevant to ethics.[18] Perhaps moral philosophers such as John McDowell and Peter Simpson, who have conceptions of 'nature' which are larger (to differing extents) than that portion of the world that science presents to us, should nevertheless bear the label 'naturalism'. This, in addition to being an etymologically more respectable move, would prevent the above philosophers from being construed misleadingly as 'supernaturalists' or 'nonnaturalists', when both of them firmly insist on the *naturalness* of goodness in some sense.[19] The imprecision of a definition of 'naturalism' in terms of 'nature' should perhaps be endured rather than evaded. But, since this thesis deals with the prospect of science providing the key to understanding morality, and since so many significant comprehensive works in recent years have used 'naturalism' to represent this prospect, such terminology will be retained here. Any

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[16]Darwall, Gibbard, and Railton (1992), 165-180.
[17]Ruse (1995), 1. Ruse does later become more precise.
[18]Lovejoy and Boas (1935), 447-456.
[19]See P. Simpson (1987), pp. 1, 5 for his definition of naturalism, and ch. 7 for his broad understanding of the natural; and McDowell (1995a) for a criticism of a definition of naturalism which is tied to science.

conclusions, therefore, cannot be seen to relate to the question of whether goodness is natural, unless 'natural' is defined in terms of science.

One idea often linked with naturalism is cognitivism.[20] Cognitivism is the belief that there is a primary cognitive element to morality (that moral judgments are capable of truth and falsity).[21] Noncognitivism, then, is its opposite, namely that morality does not primarily involve something cognitive (that moral judgments are incapable of truth and falsity).[22] Although it is true that many naturalists have been cognitivists in the past, many contemporary naturalistic theories of ethics hold that morality does not primarily involve a cognitive aspect. Philosopher Peter Railton has made the point that 'One can be a cognitivist without being a naturalist (as, for example, the Intuitionists were) or a naturalist without being a cognitivist (as, for example, some contemporary expressivists are)'.[23] If we were to presuppose cognitivism at this point, simply because many naturalists have been cognitivists, this would ignore the great variety of theses which have been produced by those naturalists who are not cognitivists. For example, Michael Ruse called his recent book *Evolutionary Naturalism*, and in it disagreed with theorists who insist on truth and falsity in ethics, instead saying that 'No ethical statement is true'.[24] Therefore, this exploration will cover moral philosophies of both cognitivist and noncognitivist persuasions.

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[20]Among those who have assumed that naturalism involves cognitivism are Moore (1903), ch. 2, esp. pp.37-39; Mackie (1977), 32-33; Mayo (1986), ch.3; P. Simpson (1987), 1; and Pigden (1991), 421.

[21]Pigden (1991), 421; Harrison (1995a), 625.

[22]Some, such as Hare (1989a), 96, prefer to utilise the distinction of descriptivism/non-descriptivism rather than cognitivism/non-cognitivism, which is logical or conceptual instead of epistemological.

[23]Railton (1993), 315. This point is also made by David Wiggins (1993), 301.

[24]Ruse (1995), 271.

These issues, as well as others,[25] are potential sources of ambiguity in an understanding of naturalism, and will result in the fact that not all philosophers cited in this thesis will agree on the definition or boundaries of naturalism. Indeed, some notable critiques of 'naturalism' have actually been composed by thinkers who themselves are within the bounds of naturalism as defined here. This does not mean that their arguments are inconsistent; it simply requires a study of naturalism to be meticulous. There are several varieties of naturalism, but thanks to much recent work the domain is capable of precise organisation. The terms and arguments of avowed naturalists must be examined in the light of any relevant distinctions in order to place them correctly. Critics of naturalism must be examined in this way as well, which will clarify the ranges over which their critiques are applicable. All of this will be undertaken in the first two chapters and applied in the remainder of the thesis. Potential for ambiguity in the term 'naturalism', then, rather than being an obstacle to philosophy, can aid it by acting as a reminder of the necessity of rigour and care.

The present study can be seen as a description of ethical naturalism and a contribution to its critique. Naturalist theories, by definition, hold ethics to utilise only principles, properties and terms that are 'accessible to investigation by the natural sciences',[26] and are therefore based on 'the kinds of facts that science could countenance'.[27]

Moreover, if the anachronism can be overlooked, Bacon, Descartes, and Locke may be interpreted as believing that naturalism was the proper way for ethics to operate, and that someone someday would prove this by

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[25]Other distinctions are between reductive and non-reductive naturalism (see I.B.3); analytical (logical and semantic) and synthetic naturalism (see I.B); and *a priori* and *a posteriori* means of justifying naturalist claims (see I.A, B.2-3). Still another is the distinction between methodological and substantive naturalism, which will not be elaborated here but is described first in Railton (1989), 155-57, and then in more detail in (1993) and (1995), 86-7. It may suffice here to say that the definition opted for in this thesis is intended to encompass both sides of all four of these distinctions.

[26]Lacey (1995), 603.

[27]Pigden (1991), 422.

elucidating a truly naturalistic ethic. Of course, this connection across four centuries of thought is vague because clarification of the key term 'science' has been avoided. Because this notion is so varied in its meanings for philosophers today,[28] a philosophical definition will not be provided here. In general it could be described as the practice of describing and explaining the workings of the physical universe through the production of theories, which are supported by empirical evidence and coherence with other such results. It will be assumed that science is actually a conglomeration of many disciplines, each of which considers a particular area of the universe or level of explanation and applies similar kinds of criteria and methodology.[29] Instead of offering a particular, and therefore limiting, philosophical definition here, two things will be done during the course of the thesis. First, during discussion of naturalism in general, it will be assumed that the philosophers involved have unproblematic understandings of the nature of science. Views on the nature or extent of science *per se* will not be examined or challenged. Rather, views on the particularities of the connection between science and ethics will be the focus for the discussion. Second, when discussion concentrates on a specific naturalist theory, the particular kinds of scientific information appealed to for support of the theory will be taken into consideration, rather than examining the theory on the basis of a general notion of 'science'. If the particular theorist makes certain claims about the nature of science, these will be considered as well,

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[28] A way into the immense literature on this subject is Hacking (1983), which describes what has been called the 'fruitful confusion of post-Kuhnian thought' (Feyerabend (1995), 809). Also see the references in n6 above. The classic referred to is T. Kuhn (1962); for contrast see Popper (1959) and Nagel (1961).

[29] One relevant issue is the question of whether 'social science' is considered part of science. Sociological theories of ethics will not be examined in detail in this thesis, but will appear occasionally. Insofar as their proponents claim sociology to be a science, the issue will not be challenged here. Sociology, insofar as it is the description of the dynamics and statistics of cultures, is at least theoretically an empirical discipline and thus has potential for status as a science. The obstacles to objective conclusions could perhaps be characterized as 'practical difficulties' rather than 'intrinsic impossibility' (Nagel (1961), ch.15, esp. p.502).

so that the theory will be examined according to the particular theorist's conception of science where that is applicable. If and when this conception is controversial, it will be designated as such.

B. Arguments

Sensitivity to the history of the issue of naturalism in ethics requires care not only in terminology, but also in the presentation of arguments. Various kinds of naturalism have been criticised vehemently in this century, and so no helpful examination of naturalistic theories can proceed blindly and assume that it is breaking new ground. This discussion will therefore begin with a more detailed exposition of naturalism, as well as an assessment of the scope of two prominent types of arguments which have been delivered during this century against naturalist theories. The first type of argument is often posed in terms of a dichotomy between 'is' and 'ought', and is of a logical nature: it claims that in light of certain conventions of logic, certain naturalist theories can be seen to be flawed. The second type of argument is often called the 'naturalistic fallacy'. It concentrates on semantics, or the meanings of words: it claims that the meanings of certain moral terms show many naturalist theories to be false. Given the limitations of these arguments' scopes, there may be a range of theories which lies beyond both criticisms; if this can be shown to be the case, theories in that range will be chosen to be discussed in the particular examination to follow. Consequently, this thesis will not primarily be a judgement as to the efficacy of famous arguments against naturalism; whether the 'is-ought' distinction and the 'naturalistic fallacy' are successful in their indictments is not the main issue here. The primary issues are the determination of the scope of those indictments, and a contribution to the effort of critical examination of

naturalist theories which evade those arguments, by claiming to operate on a different level than either logic or semantics.

After such an area of naturalism has been underscored, examination can proceed in the knowledge that the history of the discussion of naturalism has been properly taken into account. This examination will take place in a case study format. A naturalistic ethical theory of an evolutionary sort will be described and criticised in light of the interpretation of naturalism which was presented in the first half of the thesis. Reasons for choosing this particular scientific discipline, and the particular theory utilising this discipline, will be explained.

The critique offered in the case study will then be interpreted with the aim of producing a generalisable argument regarding naturalism. After any such argument has been recast in a general form, relevant implications will be drawn out. Then a suggestion will be made as to what the thesis's results taken together mean for naturalism and for moral philosophy as a whole.

Chapter I: AN EXPOSITION OF ETHICAL NATURALISM

A. The Naturalist Claim in Ethics

In the first years of this century, G. E. Moore distinguished two ways to interpret the question 'What is good?'.[1] On one interpretation, a proper way to answer is to provide examples of particular things which are appropriately labelled 'good'. We might call books or pleasure good, for example. The other interpretation involves seeing the question as one about the meaning or significance of good in general, apart from any examples: 'We may... mean to ask, not what thing or things are good, but how "good" is to be defined'.[2] Moore chose to concentrate on this latter interpretation.

When enquiring into the definition of 'good', Moore was acting within a subdiscipline known today as 'meta-ethics'. Meta-ethics deals with the meanings, but also any significance which may extend beyond the meanings, of proper ethical terms, judgements or arguments,[3] including those regarding 'good'. Meta-ethicists do not discuss what things have the quality of goodness; they discuss what is being done when one attributes the quality of goodness to something. Although a few have criticised this

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[1]Since Moore believed ethics to be 'the general enquiry into what is good' ((1903), 2), his comments about 'good' are intended as comments about the fundamental term of ethics. For those who do not employ 'good' as a fundamental term of ethics, it can be replaced by another (e.g. 'right', 'wrong', 'duty', 'virtue', or a collection of specific virtues). The distinction Moore presents is understandable when any of these terms are used. Throughout this thesis, however, 'good' will most often be used to represent the fundamental idea of ethics.

[2]Moore (1903), 5.

[3]Singer (1991), xiv; Harrison (1995), 555.

study as trivial,[4] most moral philosophers have seen meta-ethical questions to be of paramount importance in ethics.[5] To illustrate, if two people say that 'honesty is good', a potential meta-ethical difference is for one to believe this statement to essentially be an expression of a desire, and the other to believe it to represent a belief in a fact. This seems hardly a trivial difference, considering for example that a belief can be true or false, but an expression of desire is in itself neither true nor false.[6]

Meta-ethical categories, therefore, group families of ethical theories based on the types of answers they provide to questions about meaning or significance. Some of the categories used by meta-ethicists have already been presented in the Introduction. What follows is a study of one of these: naturalism. As such, what follows is a study in meta-ethics. Naturalism as defined here is the belief that science can provide the raw materials for moral philosophy to operate; more specifically, it is the following meta-ethical view:

(Ethical) Naturalism: *The view that ethics, properly understood, deals only with principles, properties, and terms that can be employed or referred to in natural scientific explanations.*

That a principle, property, or term can be employed or referred to in natural scientific explanations will be abbreviated in this thesis to being 'accessible to science'. Thus a naturalist, in the sense employed here, responds to questions like 'What is good?' by saying, at least initially, that the proper

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[4]E.g., Singer (1973); Midgley (1981), 59, sardonically defines 'meta-ethics' as 'propounding and refining moral scepticism'.
[5]Smith (1994a), 1. Darwall, Gibbard, and Railton (1992) discuss the predominantly meta-ethical character of many of the most notable debates within moral philosophy this century. The current state of the field is summarised and sampled in Smith, ed. (1995).
[6]This is a central issue debated in Smith, ed. (1995). The issue of whether morality should be seen as a matter of belief or desire is responsible for what Michael Smith has called 'The Moral Problem' (1994a).

answer must not be incomprehensible within the limits of what science can tell us.

One way in which this definition permits naturalism to be variously understood should be clarified at this point. Accessibility to science does not necessarily require that every possible statement concerning ethics, or even every possible statement leading to an ethical conclusion, be of a kind that directly depends on science for its justification. For example, statements which, if denied, would entail a logical contradiction are frequently considered to be acceptable to a naturalist. One candidate for such a status is 'Not every possible statement is true'. If this statement were false, it would be therefore proved true, which is logically impossible.[7] If logic is seen, as it perhaps always is, as an indispensable part of scientific enquiry (no scientific conclusion is an illogical conclusion), then a naturalist's acceptance of such statements as the example above is understandable and uncontroversial.

Another, more controversial, claim made by some philosophers, including some ethical naturalists, is that the meanings of certain words in ordinary language are, or else logically imply, truths which are not justified by science. For instance, a statement that is sometimes claimed by philosophers to be true in this way is '*x* is a value iff [if and only if] practical reason is on the side of valuing *x*, i.e., the deliverances of good practical reasoning support the conclusion that *x* is a value'.[8] This statement (it is not relevant here to examine its import or truth) is considered by some to be justified as true by an investigation into the meanings of the terms used, meanings which are inherent in the language used. The study of the meanings of words and the provision of definitions is known as *semantics*, and for some philosophers this study should be categorised as a logical

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[7]Putnam (1978); (1981), 83.
[8]Johnston (1989), 154.

enquiry, since definitions are relations where the word defined and the definition both logically imply each other.[9] After a seminal paper by W. V. Quine,[10] many philosophers have decided to abandon some or all alleged examples of truths gleaned from a study of ordinary language, but an ethical naturalist may theoretically reside in either camp. Some ethical naturalists are confident in their use of statements which they feel could not possibly require scientific evidence because they are true by virtue of the very meanings of the words used; whereas others believe that some or all of these statements are theoretically revisable in the face of new scientific evidence.[11] Those who allow for truths to be justified by a logical investigation into the semantics of ordinary language call such an investigation *philosophical analysis*, and the resultant truths *analytic*. This is distinguished (by them) from a mode of investigation which produces *synthetic* truths-- truths that are 'original' in the sense of not being justified as true by being shown to be either logically derivable from or inherent in the meaning of other statements.[12] Other philosophers, including followers of Quine, avoid making such a distinction.[13]

Any analytic truth (for those who uphold them) is a member of a class of truths that do not depend upon experience for their justification; one way of stating this is that such a truth 'requires reflection and conversation,

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[9]B. Williams (1985), 122.

[10]Quine (1951). His views are elaborated further in (1969), and concisely summarised in (1990).

[11]The debate over this issue is chronicled in Kitcher (1992), which also functions as a defence of *epistemological naturalism*, the belief that all statements are at least theoretically revisable in the light of scientific evidence. This Quinean idea contrasts with the views of Frege (1884), v-x, 3, 38, 105, and Wittgenstein (1921), 4.111f., who maintained that philosophy was distinct from science and therefore could never be challenged by scientific conclusions. Criticism of epistemological naturalism can be found in the works of Hilary Putnam, e.g. (1979); (1981), esp. ch.4, 8; and (1983). The point here is that an ethical naturalist may opt for a Quinean view of epistemology, a Fregean-Wittgensteinian view, or any one on that continuum. In other words, ethical naturalism does not assume or logically require epistemological naturalism.

[12]Lowe (1995), 28.

[13]Kitcher (1992), 53-74.

not empirical investigation'.[14] A truth derived from the meaning of a word is not justified with any type of evidence gained through experience. The term for this category is *a priori*, as in 'prior to' or apart from experience.[15] So, if one believes that a certain statement is true and requires no evidence at all for its justification, then one believes this statement to be an *a priori* truth. The existence of *a priori* truths is hotly contested by philosophers,[16] but insofar as many ethical naturalists do propose analytic truths in support of their theories, they are assuming the possibility and relevance of not only the analytic/synthetic distinction previously described, but also the existence of *a priori* truths.[17] Those who propose *a priori* truths in support of their ethical theory are responsible for defending this 'apriority' against attacks. In principle, an aprioristic ethical naturalist is subject to two types of arguments. First, a critic can claim that the alleged *a priori* truth is actually false, and that the falsity of the claim is itself an *a priori* truth, in which case there is a danger that the conflict will be insoluble. Second, and more commonly, a critic can simply say that the claim has no *a priori* status whatsoever. If *A* believes a claim to be an *a priori* truth whereas *B* is

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[14]Smith (1994a), 187.

[15]C.f. Moser, ed. (1987). An *a priori* truth is most often thought to assume *logically necessary* truth, i.e. truth on pain of logical contradiction. This linking of logical necessity with the *a priori* has been questioned by Kripke (1980), and anyway the concept of the *a priori* can be explained without reference to any type of necessity, logical or otherwise, as it has been above. Another type of necessity sometimes linked with *a priori* truth is *metaphysical necessity*, or truth 'in all possible worlds'. Unless qualified, however, *a priori* in this thesis means simply 'justified independently of experiential evidence', so it cannot automatically be seen to have such strong connotations as being true in every possible universe, set of experiences or conceptual scheme. As Martha Nussbaum writes, using Aristotle as an example, one can believe in the *a priori*, and yet regard this kind of necessity as a 'question that we are in no position either to ask or to answer' (Nussbaum (1986), 254-55).

[16]Kitcher (1992), 56.

[17]The *a priori* at least theoretically includes two possibilities: the usual 'analytic' *a priori*, which has to do with *a priori* truths that are inherent in the conventions of logic and the meanings of words in ordinary language. The second, and more unusual, possibility is the 'synthetic' *a priori*, where truths that are inherent in neither logic nor ordinary language are nevertheless claimed to be justified independently of experience. Incidentally, no naturalist moral philosopher cited in this thesis has claimed the definition of a moral term to be a synthetic *a priori* truth; naturalists generally repudiate the existence of such truths. For more information on the synthetic *a priori*, see its *locus classicus* in Kant (1781), Intro.B.1-19.

consistently unable to see it as such, *B* is likely to cite Ockham's razor,[18] or perhaps a healthy scepticism about *A* having what seems to be a privileged access to truth, in order to make a rejection of *a priori* status more attractive than acceptance of it. This does not mean that the critic is necessarily right--an apriorist may have tools to support his claim and therefore refute the charge that his assertion is esoteric. In short, insofar as the ethical naturalist can enlist truths derived from logic and the analysis of ordinary language as part of an ethical theory, ethical naturalism permits the utilisation of *a priori* truths. However, since the existence of such truths is a contentious matter among naturalists, such a philosopher is responsible for explaining these convincingly as well as defending the very possibility of their existence. Aside from these, truths utilised by ethical naturalists must be in principle justifiable by science. This means that they will require experience for their justification (i.e. they will be *a posteriori* rather than *a priori*), and it also means that what is meant by 'experience' here is strictly limited to the kind that science can countenance.

B. Varying Levels of Justification of the Naturalist Claim

Whatever the divergence within modern philosophy of science, there is probably no one who insists that moral principles, properties or terms are clearly an ordinary part of the conclusions of science, as obvious and incontrovertible as a simple empirical discovery. So a question inevitably arises as to the justification for seeing morality as employing only principles, properties and terms that are accessible to science. Here all

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[18]'Ockham's razor' is a term used to describe the tendency in philosophy or science to choose the simplest among a number of possible solutions to a problem, all other things being equal. In this case, an opponent of the *a priori* may claim that a rejection of the existence of *a priori* truths may be simpler than maintaining their existence, and yet still consistent with all known facts.

naturalists do not agree. There are three levels on which a naturalistic moral philosopher may seek to justify or defend his position. Each of these three levels of justification corresponds to a particular level on which to understand the naturalist claim itself. These levels will be called the *logical*, *semantic*, and *synthetic*.[19] The logical and semantic levels can be subsumed under the category *analytic*, since both of them appeal to analytic truths, or truths that are gained from an investigation into logic and the meanings of words.

1. LOGICAL NATURALISM IN ETHICS

a. *Description*

The first level on which one might seek to justify the naturalist claim is the logical. One operating on this level defends naturalism by defending the validity of a particular type of logical progression: the derivation of moral conclusions from nonmoral premises. The logical justification for naturalism depends on the truth of the following statement:

Logical Justification: *Premises consisting entirely of nonmoral terms can be used logically to derive conclusions containing moral terms.*

Of course, this assumes that some terms can (at least in certain contexts) be set apart as 'moral terms'.[20] Suppose that in the assertion 'One ought not to

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[19]A similar distinction was recognised by W. K. Frankena in his noted article of 1939, and again in (1973), 97-99; by Pigden (1989, 1991); and by Crisp (1995), 606. The latter two levels have been distinguished by Smith (1994a), ch.2. Frankena and Smith call the second level 'definitional', whereas Pigden calls it 'semantic'. Smith calls the third level 'metaphysical', whereas Pigden calls it 'ontological'. None of these use the term 'synthetic', but a defence of its appropriateness can be found in subsection 3a, below.

[20]This is relatively noncontroversial, although Anscombe (1958) and B. Williams (1985), ch.10, have called for the removal of the notion of 'moral' altogether from ethics, insofar as 'moral' carries with it the notion of an obligation. Contrast Prichard (1912), who wished to remove any term from ethics which did *not* carry with it the notion of obligation. Some (e.g. Putnam (1981), ch. 6, 9) have emphasised the 'value-laden' nature of all terms we use.

murder', 'ought' is a moral term. Someone justifying naturalism on the logical level might say that such an assertion can be properly derived from a series of premises containing no moral terms. Perhaps the premises contain reference to the termination of the life of the murdered, or the psychological damage done to the prospective murderer, or the disruption of an ordered society caused by such an action, or the contradiction of an earlier explicit or implicit promise made, or any of a number of other ideas. One or a series of such premises containing no moral terms are seen by such naturalists as capable of being assembled into a logical progression concluding in a statement such as 'one ought not to murder', containing a moral term 'ought'.

This Logical Justification can easily be shown to combine with the definition of naturalism presented earlier. Naturalism, as has been defined here, simply states that any principle, property or term in ethics is accessible to science. The logical level of justification makes the point more specific by describing why this is the case. An example of a procedure for making moral decisions which is consistent with both naturalism and the Logical Justification is the following:

1. Science provides us with information.
2. We construct premises containing only nonmoral terms to reflect that information.
3. We proceed logically from those premises to conclusions containing moral terms.

There is a difference, however, between this issue-- whether and to what extent we can divorce our concepts from our system of values-- and the issue of the distinction between terms which purport to convey a moral claim and those which do not. Someone adopting a position on the first issue is not logically bound to a position on the second. It is possible to believe that use of language is always value-laden in some sense, while recognising a distinct place for terms whose meanings are fundamental to moral discourse.

No premises are introduced which are inaccessible to scientific enquiry. This assures that the process is consistent with naturalism.

Some[21] would object to a combination of the logical justification for naturalism with a science-related definition of naturalism. According to them, a nonmoral premise does not necessarily have to be a scientifically supported premise, so science should be left out of the picture of naturalism altogether. Naturalism on the logical level would therefore be seen as any belief that conclusions containing moral terms can be derived from premises containing nonmoral terms. The problem with describing naturalism in this way is that it implies that there is nothing more to the term 'naturalism' for these adherents than the logical justification of their position. On the contrary, if one does call oneself a 'naturalist' and defends this with the logical argument above, there may very well be some content to the notion of 'naturalism' *per se*, i.e. over and above the argument one uses to defend it. In this case, the identification of the logical argument with the naturalist position would leave out any notion of what this content might be. Furthermore, if one can be called a 'naturalist' merely for accepting the validity of the Logical Justification above, the term 'naturalism' will subsequently lose any etymological grounding it may have had. One might expect 'naturalism' to have *some* relation to the 'natural', however that is interpreted (in this thesis the natural is that which is accessible to science). But if the meaning of 'naturalism' is allowed to be completely dictated by the Logical Justification, the term could then be properly used to describe theories which cannot in any sense be seen as rooted in something 'natural'. For example, C. D. Broad[22] wrote of 'theological naturalism', whereby moral claims are understood by reference to supernatural divine commands. According to such so-called 'theological naturalists', premises containing

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[21] including C. R. Pigden (1991), 422, 428.
[22] Broad (1930), ch. 4.

reference to God's commands, but with no moral terms, can logically derive conclusions with moral terms. God's having said 'Do not murder' is seen *logically* to imply the conclusion 'One ought not to murder', where 'ought' is a moral term.[23] This theory is committed to the Logical Justification, but to call this type of belief 'naturalism' would remove from that term any sense of the root 'nature' or 'natural'. That such an avowedly supernaturalist position could, ironically, be labelled 'naturalism' has been attributed by William Frankena[24] to a misunderstanding of the term which was facilitated by a certain ambiguity in G. E. Moore's influential *Principia Ethica*.[25] This ambiguity was essentially the confusion of 'naturalism' itself with an argument (though not this one) which Moore found many naturalists to use to justify naturalism.

Although one should not view the Logical Justification as being all there is to the position of naturalism justified at the logical level, this is not to say that the means adopted of justifying a position has no bearing on the nature of that position. On the contrary, the way in which one justifies a position may go a great distance towards defining it. For instance, someone could justify his certainty of the sun rising tomorrow with an argument regarding Phoebus's fiery chariot, whilst another utilises an argument containing reference to the constant rotation of Earth. The fact that a difference is now evident between these two people's ideas of sunrises, shows that a justifying argument can be very relevant to an understanding of one's position on a matter. Concerning naturalism, the use of a logical

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[23]There is a difference between a statement including a moral term, and a statement being relevant to morality. It is possible that an assertion like 'God says "do not murder"' can be very relevant to morality, while the assertion itself contains no moral terms. The Logical Justification has to do not with moral relevance, but with the presence of terms that are logically fundamental to moral discourse.

[24]Frankena (1939), 471.

[25]Moore (1903), e.g. pp.13-14, 39-42, 110-114. In these passages Moore uses 'naturalism' and its cognates in two different senses: one science-related, and one having to do with a certain type of argument which is often used to justify the science-related sense (viz., a semantic argument; see subsection 2). Moore's use of both of these two senses interchangeably gave rise to the ambiguity Frankena mentioned.

justifying argument is an obvious pointer to the fact that the person using the argument believes that the truth of naturalism is dependent on a certain conception of logic (at least). If that conception were cast in doubt, that person's idea of naturalism would be cast in doubt as well. On the other hand, it would not be sensible for someone who believed that naturalism was fundamentally something other than a logical point to use a logical justification for naturalism. Because of this, someone who utilises a logical justification for naturalism can be called a *logical naturalist*. A logical naturalist is therefore not only portraying a certain level on which to justify naturalism, but is also, and more importantly, portraying a certain theoretical level on which to understand the naturalist claim itself.

This having been said, there is a sense in which it is likely to be a formality to include logical naturalism among the levels of understanding the concept of naturalism. The reason for this is that on some views, a premise can be omitted from a logical progression if it is a necessary truth[26]-- that is, if the truth of the premise could not possibly be in question. This might be the case because the negation of the premise entails a self-contradiction, or because another similarly binding circumstance holds. It is perhaps rare that anyone would attempt to challenge the rule known as the 'conservation of logic' (the rule that no terms left unstated in the premises may appear in the conclusion) otherwise.[27] Presumably, then, when one proceeds from premises with no moral terms to a conclusion with a moral term, there is such an implicit premise demonstrating a necessary equivalence relation between one or more of the nonmoral terms and the moral term. In this case, however, the responsibility is on the naturalist to show that the nonmoral term(s) are *necessarily* equivalent to the moral term.

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[26]Smith (1994a), 192; see also Frankena (1939), 468.

[27]Although see Prior (1976); but his examples are limited to conclusions where the moral term does no work: e.g., from the statement '$x=x$', one can logically move to the following: 'either $x=x$ or I *ought* to help old ladies across the street'. See II.B.2 for more discussion of this issue.

Regardless of the success of this, the issue is no longer a matter of the *logical validity* of the progression; the inclusion of the implicit premise, even if it happens to be false, dispels any doubts as to this. Since in such a case the moral term is introduced in a premise and not just the conclusion, the Logical Justification is not being invoked and thus the attribution of 'logical naturalism' is a misnomer. Apart from this, at least theoretically, the possibility of logical naturalism remains. An example may serve to illustrate this possibility.

b. *Example*

Providing an example of logical naturalism in recent moral philosophy is dangerous, because it assumes that a writer's *intention* was to make a logical point rather than a point on the semantic or synthetic level. This may not in fact be the case, although it is true that if one appeals to the Logical Justification, then the point one *has* made is a logical one. Another difficulty in providing examples of logical naturalism arises from many writers' ambiguity as to whether the nonmoral premises' entailment of moral conclusions is supposed by these writers to be a *logical* entailment, or an entailment by some other set of guidelines which they have not explained. Although logical terminology is often used, this is not sufficient to show that the entailment is actually considered by the user to be logical (e.g., we sometimes say that someone has 'implied' something when the thing we have inferred does not *logically* follow from anything the other has said or done, on any acceptable understanding of logic). Finally, there is the possibility mentioned above that there is an implicit premise which asserts a necessary equivalence between nonmoral term(s) in the premise and the moral term of the conclusion, in which case it is not logical naturalism at all.

Despite these difficulties, there are several notable examples of arguments which are at least presented in the form of a logical justification

for naturalism, although the writers may not actually espouse this. G. E. M. Anscombe, in her secular ethical writings, discusses the possibility of proceeding from a premise containing no moral terms to a statement containing the moral term 'ought'. According to Anscombe, we can proceed from a statement about nonmoral facts to a moral statement, because we can understand a moral obligation as logically deriving from certain facts 'in the context of our [social] institutions'.[28] She provides an example (P=premise, C=conclusion):

P1: We are under certain social institutions which prescribe, among other things, the payment of debts.

P2: I have knowingly received goods in an ordinary marketing situation from a grocer (in the context of said social institutions).

C: I *ought* to pay the grocer the cost of the goods.[29]

This argument properly follows the three-part procedure outlined earlier for naturalism understood on the logical level. First, sociology provides us with nonmoral information about our social institutions; then, the above premises are constructed with reference to that scientific data; finally, moral conclusions are drawn from those premises. If one holds that this train of reasoning is logically valid, that sociology is a science and can provide us with knowledge concerning our social institutions, that P1 and P2 are true and contain no moral terms, that C contains a moral term, and that there are no implicit premises which contain a moral term, then one advocates the justification of naturalism on the logical level, and is consequently a logical naturalist.[30]

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[28]Anscombe (1981), 22.
[29]ibid.
[30]Anscombe herself has never shown signs of having accepted the last one of these stipulations. In fact, she elsewhere says that 'it *must* be impossible to infer... "ought to be" from "is"' (1958). The present point is that she here presents an argument in the same form

2. SEMANTIC NATURALISM IN ETHICS

a. *Description*

The second of the three levels on which one might seek to justify the naturalist claim is the semantic. This involves the invocation of the meanings of certain words as a support for naturalism. One operating on this level demonstrates that the meanings or definitions of certain moral words are nonmoral. The semantic justification for naturalism is dependent upon the following idea:

Semantic Justification: *Moral terms can be defined, or their meanings exhaustively expressed, using solely nonmoral terms.*

Suppose that 'good' is a moral term. Someone defending naturalism on the semantic level would claim that 'good' means, or can be defined as, a single nonmoral term or a group of them. The proper meaning of 'good' might be 'tending towards individual well-being', or 'minimising of suffering', or 'productive of the greatest happiness', or 'adhering to the conventions of society', or any of a great number of other definitions, as long as these definitions are not seen to contain any moral terms.[31] If someone believes, for example, that 'good' in a moral sense means 'productive of the greatest happiness', that person need only discover that giving to the poor is productive of the greatest happiness to realise that, by the simple

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as if she were actually a logical naturalist. Other writers who have advocated a move from nonmoral premises to moral conclusions are Searle (1964); Kohlberg (1971); and Gewirth (1982), 108ff.

[31] If, on the other hand, one of these definitions *is* seen to contain a moral term (e.g. if 'minimising suffering' is seen as an irreducible virtue in itself), then the issue of justification is merely once removed. Can *that* moral term be defined in nonmoral terms? If the answer is 'yes', then one is employing the Semantic Justification. If 'no', then one is not employing it.

substitution of a term for its definition, giving to the poor is good. Of course, this assumes that the person knows how to use his language properly.

If a definition is seen as a kind of logical relation,[32] the Semantic Justification can be seen as a logical matter. This does not mean, however, that the Semantic Justification reduces to the Logical Justification. The difference between them is how the equivalence relation between the nonmoral term and the moral term(s) is presented. If the relation necessitates an exception to the 'conservation of logic'-- the rule that no term can be introduced in a conclusion unless it first appears in the premises-- then the Logical Justification is being invoked. On the other hand, if the 'conservation of logic' is accepted, and the equivalence relation requires a premise of its own, then the Logical Justification is not being invoked. The premise establishing equivalence of the two terms must be justified by an appeal not to logical conventions, but to the meanings of the words used, and so in this case it is the Semantic Justification which is being invoked.[33]

When combined with the definition of naturalism provided earlier, a possible procedure for making moral decisions is as follows:

1. Science provides us with information.
2. Definitions are constructed from nonmoral terms that are comprehensible within the scope of that information.
3. Moral terms are substituted for their appropriate definitions.

Someone might object at this point that the second premise is vague, and possibly conceals a requirement for knowledge that is not accessible to science. An important question to ask seems to be *how we know* that a

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[32]B. Williams (1985), 122.
[33]For further elaboration of this point see II.C, introductory subsection.

certain assembly of moral terms constitutes a definition which will appropriately represent the meaning of a moral term. On this point, one employing the Semantic Justification seemingly has two options. The first is to claim that such knowledge has an *a priori* status; that is, its status as knowledge is justified in a manner which requires no experiential support. The second is to claim that such knowledge has an *a posteriori* status; that is, its status as knowledge can only be justified by an appeal to experience. As was said in section A of this chapter, the route one chooses to take does not endanger one's status as an ethical naturalist, as long as one realises that for a naturalist, 'experience' can only include that experience which is accessible to science.

Taking an *a priori* approach to semantics is very common, and for most of this century, particularly in Britain, it was more or less unquestionably seen as the only way to handle the subject properly.[34] Again, *analysis* is the general term ascribed to this *a priori* method of seeking and utilising concepts to make sense of other, more difficult concepts by virtue of their meanings and the logico-grammatical structure of language.[35] Moral philosopher Richard Brandt has maintained that throughout history this way of approaching ethical theory has dominated among ethical naturalists-- that most naturalists have presented *a priori* definitions of moral terms as the bases for their ethical theories.[36] In the first few decades of this century, this approach to ethical naturalism led into the great battles of what has been called the 'heyday of analytic meta-ethics',[37] when philosophers tried to get a grip on the grammatical structure of moral language, still in this *a priori* manner. It is a semantic

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[34]Kitcher (1992), 54-55; Quinton (1995).
[35]Grayling (1995).
[36]Brandt (1959), 156ff.
[37]Darwall, Gibbard and Railton (1992), 116-120.

naturalist's contention, if this *a priori* route is chosen, that moral language can support a naturalistic meaning to moral terms.

In the past few decades, however, analytic philosophy's hold on the assessment of the meanings of words has been questioned by the epistemological naturalists.[38] Recently, stress has been laid on the far-reaching implications of Saul Kripke's claim that *a priori* methods of doing philosophy do not even have a monopoly on necessary truths (statements which are 'true in all logically possible worlds'), which has largely been assumed since Kant stated that apriority and necessity were practically equivalent.[39] So, even if morality is thought to make use of necessary truths, there may no longer be a reason to see this as a tight case for the *a priori* status of definitions of moral terms. If Kripke is right, the realm of the *a posteriori* may very well contain necessary truths too. In this atmosphere, *a posteriori* ways of establishing the meanings of moral words have been allowed to take root among ethical naturalists. Here science is seen as the arbiter of our moral language, and empirical evidence is sought to justify and even to discover what definitions are appropriate for moral terms.

Before concluding from this that there are two well-precedented options open for a naturalist utilising the Semantic Justification when formulating definitions for moral terms, one should step back and look at the nature of the second option. The *a posteriori* approach to definitions has been called at least two different things, both of which are telling as to the extent to which they can be called *semantic* means of justifying naturalism. First, it has been called an approach of 'reforming definitions', which involves the restructuring of a definition on the basis of our scientific knowledge.[40] Second, it has been called 'synthetic identity', which involves

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[38]See Sec. A, esp. n10, n11.
[39]Kripke (1980), 34-39. This developed from Kripke (1972). See also Putnam (1975).
[40]Brandt (1979), ch. 1.

two terms being shown to represent the same thing on the basis of experiential evidence.[41] What is common to both of these terms is that they make plain that semantics *per se* is not the root of the matter, but that a word's meaning is an incidental outcome of a conclusion on another level. This explains why philosophers looking for 'reforming definitions' and 'synthetic identity' claim to ignore or supersede the meanings of certain words in ordinary language. Such philosophers seek to replace these meanings with others (in the first case) or just place them aside (in the second). Thus, although some of these people do speak in terms of definitions, it would be a misnomer to characterise them as utilising the Semantic Justification. Far from justifying their naturalism by appealing to the meanings of moral terms, they are either changing or ignoring those meanings, in order to establish their naturalist claim. The next section will deal with this *a posteriori* level of justifying naturalism. The semantic level should, then, be restricted to those naturalists who justify their position in an analytical, *a priori* manner-- that is, by an appeal to the meanings of words as we ordinarily use them. A corollary of this is that there are no epistemological naturalists who are ethically naturalistic on the semantic level, for epistemological naturalists believe that 'you have got to appeal to experience-- you cannot just think things through *a priori*'.[42]

The Semantic Justification itself should not be seen as being identical with the doctrine of naturalism, by the same argument that was given for the Logical Justification. Such an identification results in the idea that naturalism is a matter of semantics alone for those who employ the Semantic Justification, which implies that there is nothing more to the term 'naturalism' for these adherents than the semantic justification of their position. As was said of logical naturalism, it is certainly possible that a

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[41] Putnam (1975a); and (1981), 82-85, 206-208.
[42] Ruse (1995), 2.

naturalist defending this claim on the semantic level could intend some significant content by the notion of 'naturalism' *per se*, i.e. over and above the argument being used to justify it. When this is the case, claiming that 'naturalism' is simply the definition of moral terms in nonmoral terms ignores this content altogether. The mistake of confusing naturalism's justifying argument with its definition can be clearly seen in the effects of such a neglect of the etymological grounding of 'naturalism'. G. E. Moore, who has already been cited as having been a source of confusion on this matter, at times identifies naturalism with its semantic justification by saying that naturalism is the doctrine that 'good' can be defined with terms other than itself.[43] As Moore admits, this means that the term 'naturalism' and its cognates can be applied to 'metaphysical ethics'.[44] Since 'metaphysical' is actually defined by Moore 'in opposition to "natural"',[45] it is more than a little confusing for Moore to be attributing 'naturalism' to theories of ethics whose foundations are as far from natural as conceptually possible. Such can be avoided by regarding the Semantic Justification as just that-- a justifying argument for naturalism (and not the only one); whereas naturalism itself is the idea that ethics employs only principles, properties and terms that are accessible to science, or some such definition.

As on the logical level of justification, the Semantic Justification does provide evidence for the way in which its adherents view naturalism. Since they utilise a justifying argument which is rooted in the nature of words and their meanings, they evidently view naturalism as being a matter which is appropriate to that level of discourse. They view the truth of naturalism as being dependent on the meanings of certain words (at least). If that particular set of meanings were to be cast in doubt, naturalism for those adherents would also be cast in doubt. If they viewed naturalism as being

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[43]Moore (1903), 9-10, 37-38.
[44]ibid., 38-39.
[45]ibid., 110.

dependent on something other than the meanings of words, they would not employ the Semantic Justification, for it would not be to the point. Therefore, this level of justification corresponds with a specific understanding of the naturalist claim itself, and therefore a person who utilises such a justification can be called a *semantic naturalist*.

b. *Example*

Philosophers have not always been explicit as to whether their theories of ethics were true by virtue of the meanings of certain words, or by virtue of truths on another level. This ambiguity is rapidly diminishing, however, for the distinction has been explicated several times in recent years. One philosopher who has recently described this distinction is Michael Smith. He contrasts a semantic, *a priori*, or 'definitional' understanding of naturalism with a synthetic, *a posteriori*, or 'metaphysical' understanding of it, and defends a theory which is in the former category.[46] Smith, recognising the fact that *a priori* knowledge need not be obvious, develops a process in order to arrive at a definition for moral terms. This involves the summarising of as many platitudes or obvious truths about morality that can be mustered.[47] This process leads Smith to the conclusion that 'our judgements about what we are morally required to do are simply judgements about what the categorical requirements of rationality or reason demand of us'.[48] In other words, morality is defined by Smith in terms of rationality. And what we have reason to do, and therefore what is right, he defines as 'what I believe I would desire to do if I were cool, calm and collected',[49] or in other words, 'fully rational'.[50] If one does something which one believes is not what one would desire to do in this ideal reflective

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[46]Smith (1994a), 29-35.
[47]ibid., ch. 1-2.
[48]ibid., 91.
[49]Smith (1991), 406-7.
[50]Smith (1994a), 181, 184.

state, then one does something which, by definition, is wrong, since it is irrational. An understanding of the meaning of the terms 'right' and 'wrong' here forms the foundation for an ethical theory. Thus, Smith's theory is semantic.

Whether Smith is a naturalist is, of course, a different question. He does claim that he is, as the properties he invokes to support his theory are not 'over and above those which earn their credentials in a natural or a social science',[51] else he would have branded himself a 'non-naturalist'. But properties are not the only materials used in constructing an ethical theory. If Smith were to employ a principle or term that he claims is inaccessible to science, he would not be a naturalist by the present definition. But, he recognises that 'a fully rational creature is simply someone with a certain psychology', and the idealised condition he discusses 'requires nothing non-natural for its realisation'.[52] Finally, he shows that after defining 'moral terms in non-moral terms... all of the non-moral terms in our definition are themselves thoroughly naturalistic'.[53] It should be remembered that neither the assertion that morality is grounded in rationality, nor the nature of the specified idealised conditions, have to be directly supported by science, for Smith's type of theory to be naturalistic. Since Smith believes these statements to be fundamentally semantic (i.e. dependent for their truth only on the rules and definitions in our language), the burden of supporting them falls not on scientific enquiry, but on semantics. And semantics, Smith claims, can succeed in resolving these issues. So, this theory is properly categorised under the heading of semantic naturalism.

3. SYNTHETIC NATURALISM IN ETHICS

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[51] ibid., 25.
[52] ibid., 186.
[53] ibid., 35-6.

a. *Description*

The third and final level on which the naturalist may seek to justify his claim will be called the synthetic. This level of justification might involve an appeal to the nature of reality, or else to the 'set of things whose existence is acknowledged by a particular theory or system of thought'.[54] What unites all who operate on this level, however, is that they appeal to facts, or 'actual states of affairs'.[55] A synthetic justification for naturalism does not make its final appeal to conventions of logic (although it will undoubtedly involve the use of these conventions), nor does it find its grounding in the structure or function of ordinary language (although it must use this structure and function in order to convey its points). The synthetic appeal goes further, beyond our logical and linguistic conventions, to something that is held to be true independently of these things. The Synthetic Justification for naturalism is dependent on the following idea:

Synthetic Justification: *The results of enquiry into facts or actual states of affairs are necessary and sufficient to explain the principles, properties and terms used in moral experience and moral discourse.*

This definition is very broad as it stands, because no mention has been made of the type of enquiry or type of fact that explains moral experience. Such breadth was not so evident at the logical level, for the number of logical conventions that can be appealed to is relatively small. At the semantic level the breadth was a little more obvious, for the whole realm of 'nonmoral terms' was open for utilisation. Here, however, the field has been changed

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[54]Lowe (1995c), 634.

[55]Lowe (1995b), 267. The term 'actual states of affairs' must, as is evident from the preceding quote, be interpreted broadly enough so as to accommodate theories on which our knowledge is to some extent constrained by our conceptual scheme. For those so inclined, 'actual states of affairs' can hereafter be interpreted as 'states of affairs whose actuality is entailed by the particular belief system being endorsed by such-and-such a community'.

again, and the range of things which may be used includes any and every synthetic or factual truth, i.e. every truth justified by any means excepting its inherence in logical convention or ordinary language. The results of such an enquiry are on this view *necessary* for an explanation of moral experience and discourse; but such results are also seen as *sufficient* for such an explanation. Although both logic and ordinary language are undoubtedly used in the means of such an enquiry, neither the conventions of logic nor those of ordinary language are able to offer explanations of moral experience and discourse. The results of the enquiry are neither logical conventions nor ordinary language definitions.

As with the other levels, this justification may be joined with the concept of naturalism. When this is done, the result is synthetic naturalism. One procedure for arriving at moral conclusions that is consistent with both the definition of naturalism and the Synthetic Justification is the following:

1. Science provides us with information.
2. All aspects of moral experience and discourse (principles, properties and terms) are explained in terms of that information.
3. This explanation is utilised to provide moral conclusions.

Thus the Synthetic Justification allows science to do more work than it did on either the logical or semantic levels, where a good deal of the job of explaining moral experience was done instead by the rules of logic or by the meanings of words in ordinary language. Here, however, science not only provides the informational basis, as it has on all three levels, but it also acts as the bridge between the nonmoral and the moral. This bridge is not a convention of logic that allows one to proceed from a nonmoral term in a premise to a moral term in a conclusion; nor is it a nonmoral definition that is able to encompass the meaning of a moral word. Here this bridge is an

interpretation of moral principles, properties, or terms in those nonmoral terms that are deemed appropriate with regard to science. Among the important consequences of having science do this work is the limitation of the range of possible synthetic truths. Moral experience and discourse is explained by the naturalist with reference only to scientifically accessible *a posteriori* (experientially justified) truths.[56]

The second stage of the process outlined above contains reference to the fact that moral experience is 'explained in terms of' scientific information. This conceals a distinction between two modes of relating scientific conclusions to moral conclusions within a naturalism justified synthetically. The distinction is between *reductive* and *nonreductive* naturalism. Peter Railton describes this distinction well. Reductive naturalism is the more obvious of the alternatives, which is simply 'a synthetic identification of the property of moral value with a complex non-moral property'. But naturalism need not be reductive:

> 'One could, for example, hold that in the best *a posteriori* account of moral properties they emerge as irreducible natural moral properties-- supervenient upon the nonmoral to be sure, but able to "pull their weight" in the sciences in their own right. That is, moral properties might simultaneously be natural and *sui generis*.'[57]

'*Sui generis*' means that moral properties could be in a realm all their own, that is, not reducible to other properties. A nonreductive naturalist must show how a moral property can indeed be both natural and *sui generis*; this usually involves a notion of 'supervenience'. Simon Blackburn explains supervenience as follows:

> 'The idea is that some properties, the A-properties, are consequential upon some other base properties, the underlying B-properties. This claim is supposed to mean that

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[56]Although synthetic claims can theoretically be *a priori*, naturalists do not postulate synthetic *a priori* truths, for science cannot countenance them.

[57]Railton (1993), 317. This point is also made in Sturgeon (1988), 239-42.

> in some sense of *necessary*, it is necessary that if an A-truth changes, some B-truth changes; or if two situations are identical in their B-properties they are identical in their A-properties. A-properties *cannot* (in this same sense) vary regardless of B-properties.'[58]

He then goes on to describe the various types of supervenience that follow from the fact that there are several ways to understand the term 'necessary'. As both Blackburn and Railton, as well as many others, point out, the notion of supervenience in and of itself is not enough to establish a nonreductive naturalist theory-- it doesn't have much explanatory power, but merely clarifies the situation that the nonreductive naturalist is then expected to support somehow.[59]

Before continuing, some defence must be given for the use of the term 'synthetic', since the majority of existing descriptions of this level of understanding naturalism either do not label it at all or label it differently. In considering possibilities, other candidates seem to have serious shortcomings. 'Metaphysical naturalism' has been used for this level.[60] Unfortunately, use of this term invites confusion both with Moore's use of the term,[61] and 'metaphysical naturalism' as it is generally viewed today, which is roughly the doctrine that any metaphysical statement must be accessible to science.[62] It also may presuppose the same thing that another proposal, 'ontological naturalism',[63] does even more explicitly: that matters of morality are matters of being or existence. Although this is the case in many naturalistic ethical theories, it is not necessarily the case. A naturalist can theoretically justify his position on the basis of scientific evidence in a

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[58]Blackburn (1984), 182-3.
[59]Hare (1984); Schiffer, S. (1987), 153-4; Kim (1990) and (1993), ch. 9; Blackburn (1985a); (1993); Horgan (1993); Railton (1993a), 298n. Some, e.g. Post (1987), ch.6, disagree with this explainability requirement, but Horgan and Timmons (1992a) show that a rejection of it would entail a 'queer relation' in Mackie's sense (1977), 39-41, since the requirement is met in virtually every other commonly accepted case of supervenience.
[60]Smith (1994a), 28-35.
[61]Moore (1903), ch. 4.
[62]Papineau (1993).
[63]Pigden (1991).

manner which is neither semantic nor logical at its root, without making a statement about whether or not something exists; and so it seems awkward and misleading to try to tie every naturalist claim on this level to some statement about what exists.[64] '*A posteriori* naturalism' is another possibility, but the fact that such an appeal is *a posteriori* is not determined by the manner of justification itself, but only becomes evident when we combine the term with the definition of naturalism. The Synthetic Justification itself does theoretically allow for *a priori* truths, insofar as there are such things as the synthetic *a priori*. Such has been in contention ever since Kant made it an object of his *Critique of Pure Reason* to answer this question.[65] Whether or not there are any such truths, and even though naturalists do not enlist such truths in support for their ethical theories, '*A posteriori* naturalism' as a title would ignore the fact that this is an issue at all. 'Synthetic naturalism' seems most to the point, although it may not be without its own problems. For one thing, doubt has been cast on the analytic-synthetic distinction by philosophers such as Quine.[66] But, an argument could be made that Quine's real focus was the dubious status of analytic truth, and so hopefully problems can be avoided by the above definition of 'synthetic' not explicitly in terms of the analytic, as is most often done, but more positively in terms of facts or states of affairs, exclusive of any 'facts' arising out of logical convention or ordinary language. By doing so, the present level of justification can be distinguished from the past two, and it can be joined meaningfully with the definition of naturalism to produce the procedure for arriving at moral conclusions outlined above.[67]

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[64]Kant (1785), sec. 2, initial passage, claims that something being good does not preclude the possibility that 'perhaps the world has hitherto never give an example' of it. Moore (1903), 119-120, makes this point as well. Presumably a naturalist could concur, so we must leave open the possibility that something could be good but not existing.

[65]Kant (1781), Intro.B.1-19.

[66]Quine (1951).

[67]Note that 'moral conclusions' does not rule out the possibility that on a synthetically

Thus, instead of naturalism being true by virtue of logical convention, or by virtue of the meanings of certain words, naturalism on this interpretation is true by virtue of the natural facts of the matter. When we are examining the structure of logic we do not necessarily see this to be the case. When we examine the way our language functions we do not necessarily discover this either. When we look at things in an *a posteriori* manner, however, using any tools of science at our disposal and providing an appropriate philosophical interpretation of the results, we discover that morality can be properly understood within the framework of naturalism.

As one can be a logical naturalist or a semantic naturalist, one can likewise be a *synthetic naturalist*. A naturalist who believes that ethics is only properly practised when truths justified by scientifically accessible experience form the basis for the ethical theory, is a synthetic naturalist. Such a philosopher justifies the naturalist claim directly with natural facts, rather than with definitions or laws of logic. In so doing, a specific understanding of naturalism is advocated.

b. *Example*

In *Beast and Man*: *The Roots of Human Nature* and in *The Ethical Primate: Humans, Freedom and Morality*, Mary Midgley deftly applies the findings of ethology and psychology to the task of outlining 'human nature'. Her conclusion, which is intended as an empirical one (the empirical methods involved being those of the behavioural and mental sciences), can be divided into two parts. The first part is that there are 'natural dispositions' within which humans are designed to operate; there are definite psychological parameters within which humans flourish and find life fulfilling. The second part is that these natural dispositions form the basis of

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naturalistic theory, science could in some sense undermine ethics. For example, 'no moral statements are true' could be a moral conclusion.

human morality.[68] This second aspect of her work is that which makes her a naturalist. The fact that she justifies her position on the basis of scientific findings about the nature of reality classifies this naturalism as synthetic. Her ethical views are developed more fully in *Heart and Mind: The Varieties of Moral Experience*. Here she agrees with Philippa Foot that a point of view being 'moral' means that it retains 'a certain sort of seriousness and importance... other implications, whether of form or content, flow from this'.[69] The exact nature of that 'seriousness' from which all moral implications flow is described later. It is that which, in a person, 'affects something central among his systems of purposes' and 'involves connections with what is naturally important for a human being'. That system she calls 'human nature' or 'our emotional constitution', and describes it as 'a very large and general empirical fact'.[70] Consequently, the better moral course of action in any situation is the one that effects consequences which are in line with our inherent psychological needs.[71] Thus, according to Midgley, there is a common human nature which is scientifically discoverable, and moral decisions are decisions on the basis of the effects which certain actions and attitudes have on that common nature. These two aspects of her thesis thus combine to provide what seems to be a simultaneously naturalistic and *a posteriori*-- and therefore synthetically naturalistic-- means of doing ethics.[72]

This section has shown that different justifying arguments defend different notions of 'naturalism', although the general definition might be held in common. That such a thing is possible is evident when one notices that a doctrine of this sort can be defended either on the basis of its logical

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[68]Midgley (1978); (1994), ch. 13-14.
[69]Midgley (1981), 106.
[70]ibid., 16-17.
[71]ibid., 125-132.
[72]However, Midgley (1997) could be interpreted as implying a relaxation of the naturalistic claim.

form, or on the basis of the meanings that certain words have for a competent user of the language, or on the basis of factual evidence. There are three ways in which the idea that ethics requires only principles, properties and terms that are acceptable for use within scientific explanations can be established as true. It could be true if one is logically allowed to proceed from statements composed only of nonmoral terms to statements including moral terms, or if the nature of our language is such that the meaning of moral claims can be expressed just as well in nonmoral terms, or if a diligent enquiry into science and the nature of moral experience and discourse leads one to that conclusion.

C. The Relationship Between These Levels

Before applying this distinction to the ways in which modern philosophers have critiqued naturalism (which is the work of the next chapter), one question must be answered: How important is this distinction between logical, semantic and synthetic levels of justifying naturalism? For if the areas distinguished imply each other, then the conclusion reached in the last section is not very significant. On the other hand, if their relationship is not so close, this may have profound implications for an understanding of the idea and may establish certain stipulations for critique of naturalism. Specifically, if semantic naturalism has a certain degree of independence from logical naturalism, a refutation of the Logical Justification will not affect the possibility of semantic naturalism. In the same way, if synthetic naturalism has a certain degree of independence from the other two levels, then successful refutation of both Logical and Semantic Justifications will have no necessary effect on the synthetic version of naturalism.

1. INDEPENDENCE OF THE SEMANTIC FROM THE LOGICAL

Suppose that the Logical Justification is false, that one cannot proceed from a premise which contains no moral terms to a conclusion that does without incurring a logical fallacy. Semantic and synthetic levels of understanding the idea will be affected by this fact only insofar as they include such a fallacious logical progression. Otherwise, the falsity of logical naturalism will have no bearing on them.

The example of semantic naturalism described earlier (that of Michael Smith), if put into a modern logical form, could be reduced to a simple syllogism:

P1: 'Right', as a moral term, is defined as 'What we believe we would desire if we were calm, cool and collected'.

P2: The set of actions which satisfies the condition of 'What we believe we would desire if we were calm, cool and collected' is determined by empirical psychology.

C: The set of actions which satisfies the condition of 'right', as a moral term, is determined by empirical psychology.

No term was introduced in the conclusion of this progression that was not in one of the premises. The moral term 'right' was defined in the beginning, and so there are no grounds for believing Smith's theory, or any in this form, to depend on the Logical Justification being true. So logical naturalism can be false without affecting semantic naturalism. Of course, there are different types of definition, and not all are compatible with the idea that a term is equivalent, and therefore substitutable, with its definition. However, the validity of the above syllogism is enough to demonstrate that it is easily

possible for a semantically naturalistic theory to be proposed which does not involve a progression from premises without moral terms to conclusions with them. The syllogism above involves no such progression since the moral term 'right' is introduced in the first premise. Semantic naturalism, then, has a certain degree of independence from logical naturalism such that the latter can be refuted without effect on the former.

The theoretical possibility that a logical conclusion could be invalid if it contains a term *y* if *y* was not introduced in the premises, whilst *y* might still be definable in terms of *x*, can also be illustrated in non-ethical terms. If logic is conservative then one cannot proceed from premises containing 'European daisy' to a conclusion referring to '*Bellis perennis*' unless '*Bellis perennis*' appears in the premises somewhere. However, since *Bellis perennis* is the scientific name for the European daisy, one would not have to be acquainted with the analytic philosophical tradition to be able to define one in terms of the other. Therefore one cannot infer anything about the validity of defining something *x* in terms of something else *y*, from a refutation of the logical derivation of *y* from *x*.

2. INDEPENDENCE OF THE SYNTHETIC FROM THE LOGICAL

Again supposing logical naturalism to be false, the question of whether this fact affects the viability of synthetic naturalism can be answered by the conversion of a synthetically naturalistic justification (such as Mary Midgley's, summarised earlier) into a simplified logical form:

P1: An action's rightness is inherent in or a product of its contribution to human flourishing.

P2: An action's contribution to human flourishing is determined by empirical psychology and ethology.

C: An action's rightness is determined by empirical psychology and ethology.

Here again, there is no term in the conclusion above which is not present in one of the premises, and the above progression is valid under the laws of conventional modern logic. Logical naturalism involves the introduction of terms in the conclusion that were not in the premises, and so this example demonstrates the viability of synthetic naturalism whether or not logical naturalism is true. Of course, as in the Michael Smith example, Mary Midgley's ethical theory is much more complex than this. However, even if this theory is not identical with Mary Midgley's, or the former one identical with Michael Smith's, this does not diminish the point that both semantic or synthetic theories can easily be formulated in such a manner that they are unaffected by a refutation of logical naturalism. The syllogisms presented demonstrate this point.

The theoretical possibility that either *y* is supervenient on *x*, or *x* and *y* refer to the same thing (depending on whether one is a nonreductive or reductive naturalist respectively), whilst logical progression from terms involving *x* to terms involving *y* is invalid, can also be illustrated outside of ethics. It may be illogical to derive a conclusion regarding a proton from premises which contain no reference to protons but only to hydrogen cations. This logical invalidity, however, cannot imply that hydrogen cations are not protons, for they are. Their identity is a synthetic truth, and one which has been discovered by science. Therefore, one can not necessarily infer a distinction between what *x* and *y* refer to by a refutation of the logical derivability of *y*-terms from *x*-terms.

3. INDEPENDENCE OF THE SYNTHETIC FROM THE SEMANTIC

In order to discover whether this degree of independence exists between synthetic and semantic understandings of naturalism, one can assume semantic naturalism to be false, and then determine whether synthetic naturalism could still be true. Semantic naturalism being false means that one cannot provide a definition of a moral term in nonmoral terms on the basis of an analysis of ordinary language, and so one cannot appeal to semantics to justify naturalism. We can determine whether synthetic naturalism can survive in this situation by simplifying the example of it provided earlier. Let us suppose that according to facts we discover through scientific enquiry (i.e. naturalistically and synthetically speaking), our minds operate in such a way that certain actions contribute to our psychological health whilst other actions detract from it. A synthetic naturalist might claim that rightness consists in the pursuit of actions that contribute, and in the avoidance of actions that detract, from our psychological health (exactly to whom 'our' refers is not important here). The possibility of our morality being this way is not lessened at all by the lack of a basis in ordinary language for 'right' being defined in terms of 'contribution to psychological health'. Any conclusions claimed by a synthetic naturalist like Mary Midgley are immune to such arguments, for she has invoked no *a priori* analytic definitions. This difference separates synthetic naturalism from semantic naturalism in a significant way. A refutation of semantic naturalism, since it is restricted to talking about what is justified *a priori*, cannot affect the possibility of synthetic naturalism being true, for synthetic naturalism makes no *a priori* claims but states that something has been discovered *a posteriori*.

How a synthetic discovery could establish identity between x and y where an account rooted in semantics could not, may be illustrated outside of ethics. Perhaps the simplest way in which such a situation could arise is when ordinary language has evolved out of an incorrect understanding of the

way things are. For instance, there is an ancient view of the heavens whereby the sun and the stars are believed to be fundamentally different types of things, to have different ontologies (viz., the sun a great light, and stars holes in the roof of the world). This view will result in meanings for these terms which are different. A synthetic astronomical discovery could and did, however, establish identity between sun and star where ordinary language could not. Now, a synthetic naturalist can say to us that we today are in precisely the same position when it comes to moral terms. We may have two terms, one moral (say, 'right') and one nonmoral (say, 'contribution to psychological health'), which have different meanings. A synthetic naturalist will tell us that this fact of our ordinary language could be rooted in an erroneous view of the way things are. Those two terms might actually represent the same thing, and until we realise this we will continue to use them as if their different meanings necessitated different ontologies. In actuality, different ordinary-language meanings do not necessitate anything of the sort.

Synthetic identity without semantic equivalence is not only possible when there is an error in one's conception of the world. Another illustration, again from the physical sciences, is provided by Hilary Putnam. The object of semantic investigation is called here a *predicate* or *concept*, and the object of synthetic investigation a *property*:

> 'Consider, however, the situation which arises when a scientist asserts that temperature *is* mean molecular kinetic energy. On the face of it, this is a statement of identity of properties. What is being asserted is that the *property* of having a particular temperature is *really* (in some sense of "really") the *same property* as the property of having a certain molecular energy; or (more generally) that the *physical magnitude* temperature is one and the same physical magnitude as the mean molecular kinetic energy. If this is right, then since "*x* has such-and-such a temperature" is not *synonymous* with "*x* has blah-blah mean molecular kinetic energy", even when "blah-blah" is the value of molecular energy that corresponds to the value "such-and-such" of the

> temperature, it must be that what the physicist means by "physical magnitude" is something quite other than what philosophers have called a "predicate" or a "concept". To be specific, the difference is that, whereas synonymy of the expression "X is P" and "X is Q" is required for the predicates P and Q to be the "same", it is not required for the property P to be the same as the property Q. Properties, as opposed to predicates, can be "synthetically identical".[73]

This shows that even if semantic naturalism were false, and we could not on the basis of our ordinary language define moral terms in nonmoral terms (or, in Putnam's terminology, substitute moral concepts or predicates with nonmoral ones), synthetic naturalism could still be true-- we could still discover on the basis of experiential evidence that moral terms and nonmoral terms represent the same property.[74]

4. RESULTANT STIPULATIONS FOR CRITIQUE OF NATURALISM

To sum up, the distinction between logical, semantic and synthetic naturalisms is a significant distinction because the second can be true if the first is false, and the third can be true if the first two are both false. In the context of an examination of naturalism this distinction yields interesting consequences. An argument claiming to refute logical naturalism has no efficacy against semantic or synthetic naturalism. Likewise, an argument claiming to refute semantic naturalism has no efficacy against synthetic naturalism. In light of this set of stipulations, this discussion can proceed now by presenting the most prominent of twentieth-century arguments against naturalism. When these stipulations are applied to them, a

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[73]Putnam (1981), 83-85. He also makes the point on p.206-208, and in (1975a).

[74]This is a point which has been made by several writers besides Putnam in recent literature. Among those who have done so are Harman (1977), 19-20; Sturgeon (1988), 242; Brink (1989), 163-167; Pigden (1989); (1991); Darwall, Gibbard, and Railton (1992), 169-180, who summarise the attempts of some modern moral philosophers to take advantage of this concept; Railton (1993a); and Smith (1994a), 28-29.

determination can be made as to which of the three versions of naturalism, if any, are left unaffected by these arguments.

Chapter II: AN INTERPRETATION OF TWENTIETH-CENTURY CRITIQUE OF NATURALISM

A. Attention to Level in Talk of Naturalism

In the Introduction the suggestion was made that naturalism has been criticised vehemently in this century, and that the first chapter's description of naturalism might be able to throw some light upon the nature and scope of that criticism. The first chapter distinguished three levels of understanding naturalism: the logical, semantic, and synthetic. It also showed that there is a certain degree of independence of these levels such that a refutation of naturalism at one level does not affect the concept at any later level (in the order discussed). Since naturalism can be formulated as primarily a logical issue, a semantic issue, or an issue to be decided synthetically, an interesting question is which level or levels this century's prominent critique has targeted. If this question can be answered, and critique of naturalism can be interpreted in terms of its level, then determination can be made whether any of the levels remains unaffected by this critique.

To this end, this chapter will present an interpretation of arguments against naturalism which have figured prominently in this century, in terms of the threefold distinction of logical, semantic and synthetic naturalism. The suggestion here will be that this prominent critique can be divided into two strategies, each of which aims particularly at one level of understanding naturalism. The first strategy concentrates on the logical derivation of

values from facts, or (as it is sometimes phrased) the logical derivation of conclusions containing 'ought' from premises containing 'is'; as such, this is an objection to the Logical Justification. The second strategy is occupied with showing the impossibility of producing a definition of 'good' or some other moral term in nonmoral terms; this is aimed specifically at the Semantic Justification.

Of course, it may be the case that either one or both of this century's most prominent strategies of critique of naturalism are faulty and do not produce insuperable objections to the levels of naturalism that they scrutinise. Establishing their soundness is not the primary goal of this chapter. However, clarification of the nature and scope of the arguments may contribute to such a goal, because both defence of and objection to such arguments have been known to conflate the levels of naturalism. Such conflation is not always obvious, and can foster a misrepresentation of naturalism and the arguments against it. Consider one example, from a philosopher arguing against naturalism:

> '...a value-judgment contains a value element and therefore cannot be derived from premisses which contain only matters of (natural) fact. But if M cannot be derived from N, they certainly cannot be equivalent; so naturalism fails.'[1]

The first sentence clearly attacks the Logical Justification, but the second sentence is too general. The last section of Chapter I has provided examples of how M might not be derivable from N but nevertheless be semantically or synthetically equivalent to it. Conflation of the levels of naturalism is also evident among those more favourably disposed towards naturalism:

> 'Philosophers who argue for the adoption of any normative framework... employ a common strategy, namely to justify the adoption by showing that the framework sanctions certain empirical descriptions that are deemed well confirmed. This

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[1]Mayo (1986), 42.

> leads me to reject the common belief that inferring values from facts is *ipso facto* fallacious'.[2]

The first sentence contains a description and endorsement of the Synthetic Justification. It claims that empirical study is the means by which one properly justifies a normative (e.g., ethical) theory. However, the second sentence claims that acceptance of the Synthetic Justification led the writer to accept the Logical Justification despite objections. This does not follow. One can easily accept the Synthetic Justification and at the same time reject the Logical Justification. An empirical study may justify an ethical theory in a way which does not involve the inference of values from facts, as was shown in the last section of Chapter I. Since this is the case, philosophers 'employing the common strategy' this writer mentions can still believe that 'inferring values from facts is *ipso facto* fallacious'. Whether or not this writer is aware of the distinction between synthetic and logical naturalism, or intended to make the claim that is implied, such wording certainly opens the door to conflation of the different levels of understanding naturalism. This chapter, together with the previous one, should clarify these kinds of issues and remove the confusion which can arise from either casual use of terminology or a lack of understanding of the relevant distinctions in this area.

The primary contribution of this chapter to the thesis, however, is the determination of whether and how naturalism can evade the two prominent critical strategies which this century has witnessed; and if so, to provide an outline of what this escape route looks like and whether any problems may confront it. Once this is done, the way will be prepared for further chapters to examine a specific theory in this less criticised area of naturalism, and to attempt to distil a generalisable argument from this examination.

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[2]Richards (1989), 337.

B. Arguments Against Naturalism on the Logical Level

The Logical Justification for naturalism is the idea that *premises consisting of nonmoral terms can be used logically to derive conclusions containing moral terms.* Some of the arguments that have been offered in recent decades against naturalism have operated at this level. Such arguments have depended on what has been called a logical fallacy in proceeding from 'is' in premises to 'ought' in conclusions.

1. HUME'S LAW

The notion that one can come to conclusions which contain moral terms (such as 'ought') by a logical progression from premises which do not contain any such terms was criticised by the Scottish philosopher David Hume in 1739:

> '[moralists] proceed for some time in the ordinary way of reasoning... of the being of God... or observations concerning human affairs... when of a sudden, I am surprised to find that instead of the usual copulations of propositions *is* and *is not*, I meet with no proposition that is not connected with an *ought*, or an *ought not*... as this *ought* or *ought not* expresses some new relation or affirmation 'tis necessary that it be observed and explained; and at the same time a reason should be given for what seems altogether inconceivable, how this new relation can be a deduction from others which are entirely different from it.'[3]

Hume could not imagine how, in a process of logical reasoning about morality, one could deduce a statement which contains an 'ought' from any number of premises, none of which contain an 'ought'.[4] The above passage

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[3]Hume (1739), III.i.1.

[4]The fact that 'ought' in many cases is nonmoral, but that Hume was talking specifically about a moral understanding of the term, is explicated in Mackie (1977), 67.

has been cited abundantly in this century, and the impossibility of logically deriving an 'ought' from an 'is' has been named 'Hume's Law'.[5]

a. *Content based interpretations*

At first glance the passage seems to have at least two possible interpretations, each of them fairly simple. The first is that Hume was merely defending what is often called the 'conservation of logic': the requirement that 'when a deduction is made formally explicit, no statement employing a given expression can be logically derived from premises that do not also contain the expression'.[6] On this interpretation, any two words could be inserted in place of 'is' and 'ought' and his point will be made just as clearly. For instance, one philosopher has proposed that the law would be just as forceful if 'need' replaced 'ought'.[7] Another has been even more explicit, saying that Hume's prohibition holds equally well of conclusions which contain the term 'hedgehog' from premises which do not contain 'hedgehog'.[8] Hume was, one might say, defending a particular instance of a general rule. The second interpretation claims that Hume seems in his passage to view facts and values as very different types of things, and that this, and not just the 'conservation of logic', is the force of the passage. It is not merely because 'is' and 'ought' are two different words that one may not derive one from the other in a logical progression; rather, the meanings of 'is' and 'ought' statements are so different that one could hardly understand a

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[5]Among the works of this century which strive for an understanding of this passage are Broad (1930), ch. 4; Frankena (1939), 465-66; Dennes (1960), 94-96; MacIntyre (1966), 173-174; the articles collected in Hudson, ed. (1969), especially the first of the four parts; Stroud (1977), 187ff.; Mackie (1977), 64-73; (1980), 61-63; B. Williams (1985), ch. 7; Pigden (1989); (1991), 423-425.
[6]E. Nagel (1961), 374.
[7]Anscombe (1958), 31.
[8]Pigden (1991), 423-24.

conclusion in terms of one as having anything to do with premises which contain the other.[9]

As the literature regarding this passage attests, there are several intermediates between these two interpretations. For instance, according to one interpretation, nothing is wrong with progressing from an 'is' to an 'ought', but Hume's Law insists that to claim that such a progression is *logical* is a fallacy. Instead, the progression should be described as psychological, meaning that we tend to make the progression in our minds although there is no logical constraint on our doing so.[10] Whatever point on this continuum is chosen, however, Hume's prohibition stays fundamentally the same: one cannot logically derive an 'ought' statement from any number of 'is' statements. The difference in interpretation arises in attempts to answer the question *why* (e.g. 'because logic is conservative', 'because values are very different from facts', or 'because the progression is psychological and not logical'). So, all interpretations based on the content of this passage agree on what Hume was fundamentally prohibiting, and all interpretations involve a refutation of the Logical Justification for naturalism. Different interpretations might disagree on why the Logical Justification is claimed to be invalid, but all agree that it is so claimed.[11]

Alasdair MacIntyre has mentioned the possibility that perhaps Hume meant only that the 'transition from *is* to *ought* needs great care', rather than being necessarily fallacious.[12] However, as long as the logical progression remains in the form Hume described (an 'ought' in the conclusion but not in the premises), his comment that the derivation 'seems altogether

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[9]E.g. Moore (1903), 124-26, argues that existence and goodness are two different things, such that the latter cannot be understood in terms of the former.

[10]Stroud (1977), 187.

[11]Some philosophers have advocated using the term 'naturalistic fallacy' to describe what is prohibited in this passage. Since Hume did not use this term, and since it was used very notably by G. E. Moore in his discussion of semantic naturalism, this term will here be restricted to naturalism discussed at that level.

[12]MacIntyre (1966), 173-74.

inconceivable' leads one away from the view that any amount of 'great care' could avoid a fallacy. If, on the other hand, MacIntyre was referring to care in constructing the premises of the argument, such that one is careful to respect the 'conservation of logic' but still yield the same conclusion, then it may be possible that a transition close to a derivation of 'ought' from 'is' could effectively be made without incurring a fallacy. This possibility will be investigated further, after another possible interpretation of Hume's Law is described.

b. *Contextual interpretation*

By characterising Hume's is-ought distinction as solely a logical matter, this treatment might be vulnerable to an objection that Hume has been not been given sufficient attention. This oft-quoted passage has been taken out of context, one might say, and to understand his point one must step back to view the place of the passage in *A Treatise of Human Nature*, and in Hume's moral philosophy as a whole. This citation appears in a section of his treatise entitled 'Moral Distinctions Not Derived from Reason', which is an attempt to answer the question of whether morality is ultimately a product of *reason* or *sentiment*; 'whether we attain the knowledge of them by a chain of argument and induction, or by an immediate feeling and finer internal sense'.[13] The 'Hume's Law' passage is found in the middle of a sustained argument against the first possibility, that morality is a matter of reason. In this light, the passage can be seen to contribute (in addition to a number of other arguments provided before and after it) to a major ethical point of Hume's: that no judgement made by reason determines any moral conclusion-- that morality is essentially nonrational.[14] Hume went on at even greater length twelve years later to make this point again. He

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[13]Hume (1751), 2.
[14]Hume (1739), III.i.1-2.

emphasised that when a person recognises a moral obligation, or an 'ought', a feeling of attraction towards the virtue and a repulsion to the vice is necessarily a part of such a recognition.[15] Reason, which makes judgements concerning matters of fact and the relations among objects,[16] cannot provide us with any such attraction or repulsion; it merely gives us the facts. That is why, according to Hume, there is a 'great difference' between a matter 'of *fact* and one of *right*'; for a fact (an 'is') is an emotionless calculation using the tools of reason, whereas what is right (an 'ought') always involves attraction and repulsion and thus must primarily be a matter of feeling.[17]

It is possible, therefore, to interpret Hume's Law not only as a prohibition of certain types of logical progression with regard to morality, but as a defence of a certain position on the perennial issue of the relationship between morality and rationality. This position is that doing something morally wrong 'is not contrary to reason',[18] but rather is contrary to the dictates of an emotion. The typical opposing view is that with respect to morality 'we can rationally decide what to do, or what to ask or advise others to do'.[19] This quote is from R. M. Hare, who has stated that for his entire life he has tried to show that Hume's way of looking at reason was 'a fundamental mistake'.[20] If reason can be practical, moral decisions could ultimately rest on rational considerations rather than sentimental ones.[21]

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[15]Hume (1751), 4.
[16]ibid., 127.
[17]ibid., 132. This does not mean that Hume claims reason to be irrelevant to the making of moral decisions; its place is not primary, but it does aid in the process (p.130-2).
[18]Hume (1739), II.iii.3.
[19]Hare (1989a), 93.
[20]Hare (1989), 100.
[21]Some believe that the dichotomy Hume presents between reason and sentiment is a false one or at least needs radical qualification; e.g. T. Nagel (1970); McDowell (1978); Midgley (1981); Dancy (1995).

The abundance of recent literature regarding this and related issues suggests that such debate remains a fixture in moral philosophy.[22]

Although Hume's Law *did* figure into Hume's argument regarding this reason/sentiment issue, the question still remains as to whether accepting Hume's Law actually commits one to a position in favour of sentiment. The last chapter showed the dangers of confusing an argument for a position with the position itself, in the context of logical and semantic justifying arguments for naturalism.[23] In order to determine whether a similar situation is present here, one can imagine the position of a rationalist who accepts Hume's Law, and then look for a logical contradiction. One need not look far to find someone of this persuasion: Hare, the example of a rationalist provided above, nevertheless endorses Hume's Law.[24] The worth of such an example depends on Hare's not having compromised or 'watered down' Hume's Law. Hare does place two qualifications on the passage as it stands. The first has only to do with using 'ought' in a nonmoral sense,[25] and thus has nothing to do with the present project. The second allows for proceeding from premises without an 'ought' to certain conditional conclusions of the form 'If *A* ought to do *x*...'.[26] Embedding '*A* ought to do *x*' in a conditional, as Hare agrees, refrains from making a statement as to whether *A* really ought to do *x*, and so this qualification cannot be seen to justify naturalism. Whether *A* ought to do *x* is left as an open question in this conclusion; no answer to it logically follows and therefore this qualification does not compromise Hume's Law. In fact, Hare in another place uses the basis for this qualification (his doctrine of

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[22]e.g. Foot (1972); (1978); B. Williams (1981); Korsgaard (1986); Brink (1986), which contains additional bibliography; (1989), 39ff.; Wallace (1990), which is a review and commentary on the variety of positions; Smith (1994a); McDowell (1978); (1979); (1995); Dancy (1993); (1995); Blackburn (1995); Lawrence (1995).
[23]See I.B.1-2.
[24]Hare (1952), 2.5; (1981), 1.4, 12.1; (1989a), 90-91.
[25]Hare (1952), 2.5.
[26]Hare (1977), 469.

universalisability) to argue *against* a large region of naturalism.[27] Hare, though he disagrees with Hume's objection to rationalism, sounds very much like him when he says of 'It is wrong' that 'I have repeatedly made clear that I do not think that such a statement can be derived from *any* statement of fact.'[28]

So, unless Hare and other notable philosophers[29] have been blind to a contradiction, a philosopher can accept Hume's Law while also accepting the ethical position (rationalism) which Hume was repudiating. Thus, it is likely that Hume's Law can be properly understood even if it is taken out of the context in which it figured in his philosophy. The Hume's Law passage makes a coherent argument apart from its context, an argument which can be endorsed even by those who disagree with the context. This argument is a condemnation of logically proceeding from premises in which there are no moral terms, such as 'ought', to conclusions wherein there is such a moral term.

2. CONTEMPORARY DISAGREEMENT OVER EFFICACY

Although the argument of Hume's Law has been clarified, its *truth* has not yet been discussed; this issue has engendered at least as much, and probably more, controversy than the issues surrounding the passage's interpretation. While Hume's Law has been wielded by some as a bludgeon against naturalism during this century, it has by others been called into question.[30] A few of these challengers (some of which have already been

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[27]Hare (1981), 4.2.

[28]ibid., 12.1. Hare immediately clarifies that 'We have to distinguish between "Never do a thing like that," and "Jones said 'Never do a thing like that'",' and says that he is talking about statements of the former type.

[29]Peter Singer is another example of a rationalist who explicitly defends Hume's Law (1981), 69, 74-86. Bernard Williams (1985), 123, claims that there is no straightforward relation between Hume's Law and the notion of morality being nonrational.

[30]A notable survey of this controversy is Hudson (1969).

cited[31]) present their arguments by claiming to have discovered a way in which substantial 'ought' statements can appear in the conclusions of a logical progression without appearing first in the premises. Essays designed as instruction booklets, with titles such as 'How to Derive *Ought* from *Is*' and 'From *Is* to *Ought*: How to Commit the Naturalistic Fallacy and Get Away With It', testify to the general approach.[32] The rebuttal to such an approach is often accomplished by demonstrating that any one of the following is the case (these are not necessarily exclusive):

1. A psychological or other entailment is being offered, not a logical entailment,[33]

2. A hidden, but still illogical leap from a nonmoral term to a moral term occurs in the offender's logic,[34]

3. A supposedly nonmoral term in the premise is actually a moral term,[35]

4. A supposedly moral term in the conclusion is actually a nonmoral term.[36]

The continued failure of such attempts to validly violate Hume's Law has led John Mackie to be confident that 'such arguments, therefore, constitute no threat to any sensible interpretation of Hume's Law'.[37]

Not all of the challengers are vulnerable to these types of criticisms, however. At least one philosopher has attempted to diffuse Hume's Law by

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[31] See I.B.1.
[32] These are the titles of Searle (1964) and Kohlberg (1971) respectively.
[33] E.g. MacIntyre (1981), 64-65, claims that our need for something (an 'is') does not *logically* entail that we morally ought to have it.
[34] E.g. Mackie (1977), 67-72, claims that such a covert move is found in premises wherein a promise (an 'is') is assumed to entail an obligation (an 'ought').
[35] E.g. Black (1989), claims that certain terms like 'sadistic' are smuggled moral terms, because they imply wrongness.
[36] E.g. Prior (1949), ch. 5, claims that if a conclusion contains an 'ought' which is created by an individual simply because he wishes to do so, it is not a moral conclusion.
[37] Mackie (1977), 71.

presenting a logical progression where the word 'ought' appears in the conclusion as the second half of an 'or' statement, where it is vacuous.[38] For example, if I am sitting in a chair, I can logically conclude that I am either sitting in a chair *or* I ought not to kill. Obviously, the second half of this conclusion could just as easily be replaced with its negation, or any other statement. Since its validity depends on its vacuity, and no moral claim is made by a vacuous statement, no justification can be made for any moral view, including any naturalist one, with such a statement.[39] Therefore, this 'exception' to Hume's Law, like the qualification Hare described (embedding 'ought' in a conditional), cannot be seen to compromise in any way the capacity of Hume's Law for undermining a justification of naturalism on the logical level.

There are still other challengers. Some have claimed Hume's Law to fail if the entire logical progression can be seen to operate within 'some institution'[40] or a certain 'structured context';[41] a common example of this is a 'backdrop of social institutions, expectations, and sanctions'.[42] Others claim that one might reject Hume's idea that moral judgment is practical and thereby remove 'the ground of his contrast between facts and values'.[43] The list could continue, but from these examples it is becoming clear that the discussion has moved far away from the simplest interpretation of Hume's Law, based on the 'conservation of logic'. Only one of all of the criticisms mentioned here has attacked the 'conservation of logic' specifically, and that one could do so only by restricting conclusions to those which are vacuous. None of the other challengers to Hume's Law directly engage the 'conservation of logic', and so even if their challenges are cogent they cannot

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[38]Prior (1976).
[39]Pigden (1989); (1991), 424.
[40]Mackie (1977), 72.
[41]Gewirth (1982), 108.
[42]Railton (1993a), 295. See also Dennes (1960), 94-98; and Anscombe (1981).
[43]Railton (1986), 170.

necessarily be seen to endanger any meaningful interpretation of Hume's Law. In order to determine whether any of these challengers are in any indirect way calling into question the 'conservation of logic', one must first deal with a certain variable which has been latent in the discussion.

The fact that Hume's Law is a *logical* matter was understood from Hume's language, where he talks of 'reasoning' and 'deduction'. Therefore, Hume's Law cannot be said to affect those who claim to proceed from nonmoral statements to a moral conclusion not by logic, but by some other means. For example, Hilary Putnam claims that an 'ought' can arise in our minds as a result of our recognition of an 'is'; in this way 'descriptive predicates naturally *acquire* an emotive force'.[44] Others might suggest that a moral value *emerges* from a certain collection of facts, insofar as emergence is defined as a nonlogical relation.[45] These philosophers do not violate Hume's Law because they admit to arriving at their moral conclusions in a nonlogical manner. Consequently, they are not appealing to the Logical Justification, and are not logical naturalists.

The variable which muddles discussion of Hume's Law, however, even when Hume is agreed to be making a logical point, is the fact that not every participant in the discussion places the same constraints on 'logic' when they attack (or defend) Hume's Law. At first glance this seems not to be a very important variable, since the logic behind Hume's Law is buttressed by the 'conservation of logic'; and as was stated in the last chapter, it is unlikely that anyone would attempt, or has attempted, to undermine this stable doctrine in a substantial way in the course of

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[44]Putnam (1981), 209.
[45]E. Nagel (1961), 367-374.

defending an ethical view.[46] The 'conservation of logic', again, is the requirement that 'when a deduction is made formally explicit, no statement employing a given expression can be logically derived from premises that do not also contain the expression'.[47] There is at least one way, however, for variation to arise within the constraint made by the 'conservation of logic' that can result in confusion regarding Hume's law. Specifically, a deduction may or may not be 'formally explicit', which is the only situation in which the conservation of logic can be tested. In other words, challengers to Hume's Law may or may not be involving implicit premises. Those who claim that a logical progression can be seen to operate within a set of institutions are either attempting to dispense with the 'conservation of logic' (which is not claimed in any of the challenges documented here), or else there is an implicit premise in their reasoning that certain institutions presuppose 'oughts' (which is sometimes claimed[48]). Likewise, if one believes moral judgment to be nonpractical, this can be explicated by defining 'ought' as such in the premises, which removes the danger of contradicting Hume's Law. Such an implicit statement, or 'bridge principle',[49] is most often a definition or explanation of the meaning of the moral term to be included in the conclusion. Some philosophers require all premises to be explicit,[50] while others more casually allow for certain premises to be implicit, such as 'necessary truths'.[51] David Wiggins has

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[46]See I.B.1. One might cite 'deontic logic' (the study of the logical relations between normative matters) as an exception here, for it can involve obligation relating to such concepts as permission in a logical manner, and this might include cases of inference of one from the other. Among its proponents is Åqvist (1984). Deontic logic has been described by some (e.g. Pigden (1989)) as not being a type of logic at all, under any acceptable understanding of the term. S. Kuhn (1995) describes a main objection, its lack of 'topic-neutrality'. If the entire programme is presupposed to operate entirely within an ethical or normative framework, however, deontic logic does not contradict the 'conservation of logic'. Given the debate, the validity of deontic logic and its relationship to the 'conservation of logic' are here left as open questions.

[47]E. Nagel (1961), 374.

[48]E.g. Railton (1993a), 295; Anscombe (1981).

[49]E.g. Sinnott-Armstrong (1996), 11.

[50]Pigden (1991), 425.

[51]Smith (1994a), 192.

suggested that discussions of 'is' and 'ought' often proceed by what might even be called a trick, because these words are presented as if they are to be understood as having certain meanings, when those meanings are never clarified.[52] Were a requirement instituted at the start of a discussion for all premises to be explicit, any who had fallen foul of Hume's Law would have the opportunity to vindicate their theories from such a position. If the wording of the arguments of the objectors is any indication, virtually all of them would not be disobeying Hume's Law if their deductions were formally explicit. This is because they would be offering explanatory premises such as definitions, and as is generally accepted, 'on the truth or otherwise of definitions, logic is not competent to decide'.[53] Such objectors to Hume's Law, if all of their premises are made explicit, can be seen not to object to a logical matter, but to a matter on another level (regarding the truth of the bridge principle). In a situation where all premises are explicit, the only route by which one could accept the Logical Justification and thereby defy Hume's Law is to attack the 'conservation of logic' specifically, which is not generally done.

If this discussion of the 'conservation of logic' and implicit premises, together with Hume's own talk of 'deduction' and 'reasoning', give credence to the interpretation that Hume's Law is a logical matter, then there are clear parameters within which it properly operates. Any argumentation for or against it which is semantic (e.g. 'One can proceed from "is" to "ought" because "ought" can be defined as...'), or synthetic (e.g. 'Hume's Law is right because the nature of moral obligation has been determined to be...') is irrelevant to the substance of Hume's claim, which is logical. The only level of naturalism that Hume's Law clearly criticises is logical naturalism. In fact, if the conservation of logic is accepted, then Hume's Law, strictly

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[52]Wiggins (1995), 248.
[53]Pigden (1991), 425.

understood, follows: if 'no statement employing a given expression can be logically derived from premises that do not also contain the expression', then the expression 'ought' is not exempt from this restriction. Since this directly contradicts the Logical Justification, it is enough to show logical naturalism to be fatally flawed. Of course, some might want to extend the spirit of Hume's Law beyond the letter of it, perhaps on the basis of its context, into the realm of the semantic or synthetic.[54] Philosophers who have explicitly criticised naturalism on these levels (of whom Hume is *not* one), will be discussed in the appropriate sections.

Some have found Hume's is-ought distinction awkward as a forum for discussion of naturalism for other reasons. For example, an 'ought' statement to many philosophers is considered to be a special kind of statement of fact, or 'is' statement; the matter of ethical significance here is not the choice of word, but the *meaning* of that word.[55] So it is to the study of meanings, or semantics, that a discussion of naturalism must turn.

3. AN ESCAPE ROUTE FOR NATURALISM: APPEAL TO SEMANTICS

Hume himself was a naturalist.[56] Some have used this as evidence for the allegation that he 'is a notoriously inconsistent author',[57] but in light of the threefold division of naturalism it is evident that Hume could consistently be a naturalist on another level while arguing against logical naturalism, whether he recognised the distinction as such or not. If this is the case, then his ethical theory is proof that the impossibility of deriving an

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[54]E.g. Stroud (1977), 187.
[55]G. Warnock (1967), 60-61; Midgley (1980), 219; Wiggins (1995), 248.
[56]Hume believed that morality dealt with the experience of universal approval sentiments which are empirical facts: (1751), 4-5, 109-113, 129-132. This does not necessitate that his naturalism involves a *reduction* of moral language to those sentiments, however; on which see Wiggins (1993).
[57]MacIntyre (1966), 174.

'ought' from an 'is' can be admitted, and naturalism still maintained. One may show this is by attention to the wording of a logical progression. For example, the following reasoning would be criticised by Hume as invalid:

P1: The sentiment of contempt or disapproval is present in the calm and healthy human soul towards the action of murder.

P2: Nero murdered Agrippina.

C: Nero ought not to have murdered Agrippina.

'Ought' appears above in the conclusion but in none of the premises, which is precisely what Hume prohibited in his famous passage. However, to remedy the situation, one could simply add a premise to the reasoning that could be said to have been an implicit 'bridge principle':

P3: If the calm and healthy human soul experiences the sentiment of contempt or disapproval at an action, then a person ought not to perform that action.

Whether the premise is true or not, if it is inserted the logic is indisputably valid. In fact, Hume himself, on the traditional interpretation of his ethical theory, would have endorsed this argument as sound and its conclusion as true.[58] Since the breaking of Hume's Law can be so easily avoided, his specific complaint in that oft-cited excerpt cannot be seen to be as potent a weapon against naturalism as has sometimes been supposed.[59] The reason for this is that the term 'ought' can be defined in a premise if one wishes to do so. To dispute *this* move, one cannot argue on the grounds of Hume's

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[58]The example of Nero murdering Agrippina is used by Hume to illustrate the process of determining the moral nature of actions in (1751), 131-132.

[59]E.g. Mayo (1986), 42, erroneously claims that 'naturalism fails' under the judgement of Hume's Law.

Law nor cite any logical fallacy, for the above progression is logically valid. Instead, one must argue that the proposed definition of 'ought' is incorrect, and so P3 is false. But doing this is not a matter of logic at all, but a matter of semantics. So, to escape the force of Hume's Law, one may shift the burden of proof from logic to semantics; only the addition of a premise (or the explication of an implicit premise) is required to do this. One thereby shifts the level of justification of naturalism, and thus the level of understanding of the doctrine, from the logical to the semantic. If one chooses not to do so, and insists on justifying naturalism with an appeal to logic, then it is likely that Hume's Law, with the force of the 'conservation of logic' behind it, will confute the attempt.

C. Arguments Against Naturalism on the Semantic Level

The 'is-ought fallacy' discussed by Hume may be easily avoided in its strictest sense, but in order to do so one must justify the additional premise that was required in order to make the logic valid.[60] The last section showed that one cannot avoid dealing with the justification of one's claims about morality by fobbing them off as being inherent in the very conventions of logical reasoning. If one is a naturalist, then one must justify this position-- presumably on the basis of the meanings of the moral words used (semantically) or else with experiential evidence (synthetically). This section deals with the first of these two options, which is an appeal to the Semantic Justification. This states that *moral terms can be defined, or their meanings exhaustively expressed, using solely nonmoral terms.* As was explained in the first chapter, an appeal to the Semantic Justification must be an *a priori* matter, or a matter which does not depend on experience for the

[60]Sinnott-Armstrong (1996), 10-12.

justification of its claims. The reason for this is that any *a posteriori*, or experientially dependent, notion of definitions or meanings would constitute an appeal not to semantics *per se*, but to an understanding of experience, as represented in synthetic claims. Since semantics on such a view is not the last word, but is subject to revision on the basis of those synthetic claims, this type of justification will not be called semantic in this thesis, but rather synthetic.

Defining one term with another can be seen as a 'kind of logical equivalence or two-way implication',[61] and so defining moral terms in nonmoral terms might be considered a species of logical naturalism. This would be imprecise, however. Although the semantic equivalence of two terms is a logical relation, it is a logical relation that is being *specified in a premise*. This insures that there is a moral term in the premises of an argument, and so no illogical 'ought' from 'is' will occur in the reasoning. Naturalism can arise out of logical considerations, such as definitions, without violating Hume's Law, which has a very specific content. Thus, R. M. Hare was speaking of semantic rather than logical naturalism when he said that 'the traditional programme of moral philosophers' is 'that of using logical considerations, arising out of the meanings of the moral words, to get them from an "is" to an "ought"'.[62] The Logical Justification is not being appealed to here, for a premise will contain a definition of a moral word. It is the Semantic Justification on which this attempt relies.

As Hare said, what has here been called the Semantic Justification has had many adherents throughout the history of philosophy, as evidenced by the wide variety of naturalistic theories of ethics which have been defended on the semantic level. Other philosophers agree: 'historically, the main tradition of ethical naturalism has in fact presented itself as a semantic

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[61]B. Williams (1985), 122.
[62]Hare (1971), 8.

theory which gives a *reportive* definition of the actual meanings of ethical terms in ordinary language.'[63] If this is true, then arguments against the Semantic Justification endeavour to refute this tradition as a whole, and therefore must be examined with assiduity.

1. 'IS' AND 'OUGHT': FROM HUME TO MOORE

Some think the spirit of Hume's Law to say more about the nature of moral terms like 'ought' than is recognised by a literal interpretation of the passage. A few decades later, the Prussian philosopher Immanuel Kant was more explicit (and extreme) about the distinction between 'ought' and 'is' than Hume ever was, to the point of claiming that attention to what *is* (naturalistically speaking) would actually corrupt an understanding of the moral *ought* rather than aid it:

> 'We see philosophy brought to a critical position, since it has to be firmly fixed, notwithstanding that it has nothing to support it either in heaven or earth. Here it must show its purity as absolute dictator of its own laws, not as the herald of those which are whispered to it by an implanted sense or who knows what tutelary nature. Although these may be better than nothing, yet they can never afford principles dictated by reason, which must have their source wholly *a priori*... Thus *every empirical element is not only quite incapable of being an aid to the principle of morality, but is even highly prejudicial to the purity of morals*, for the proper and inestimable worth of an absolutely good will consists just in this, that the principle of action is free from all influence of contingent grounds, which alone experience can furnish... To behold virtue in her proper form is nothing else but to contemplate morality stripped of all admixture of sensible things..."[64]

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[63] S. Ball (1988), 198, emphasis in original. This point is also made by Brandt (1959), 156ff.

[64] Kant (1785), II.43-44, 44n. (emphasis mine).

Perhaps the main point here is that morality must ultimately be based on an *a priori* foundation, rather than an *a posteriori* one.[65] The semantic naturalists, in accepting this point by attempting to justify their ethics by an appeal to the *a priori* meanings of words, are in Kant's good graces to a certain extent. However, there is another point in this passage which can be seen as a step towards the most prominent twentieth-century argument *against* semantic naturalism. Kant was a firm believer in the scientific enterprise, and defended the certainty of the knowledge gained from natural science in his *Critique of Pure Reason.* To this extent he was like Hume, who respected science enough to devote what he saw as his greatest work to the introduction of the method of the sciences into moral philosophy.[66] However, whereas Hume did not advocate a gap between 'is' and 'ought' that was so wide as to divorce his ethics completely from a naturalistic study of the world, Kant from this passage may be interpreted to have done exactly that. Kant's belief that the proper contemplation of morality is 'stripped of all admixture of sensible things' and unsoiled by 'empirical elements' could easily be taken to mean that proper moral discourse should be stripped of any terms which represent those 'sensible things' and 'empirical elements'--anything which, from a naturalist's point of view, 'is'. On this interpretation, moral terms like 'ought' would have no relation, including any semantic relation, to the 'is'. For this reason, classical moral philosopher Peter Simpson has claimed:

> 'It is this Kantian doctrine of the "is" and the "ought" and the autonomous will that is really decisive, historically, for the emergence of the "Is/Ought" distinction... Only at this stage did non-naturalism come, as it were, fully of age. That is why it is Kant, rather than Hume or any other philosopher,

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[65]Kant believed the *a priori* to deal solely with necessary truths, and the *a posteriori* with contingent (nonnecessary, 'could logically have been otherwise') truths. Since Kant believed moral truths to be necessary truths, he assumed that they would have to be *a priori.*

[66]Hume (1751), subtitle. On this being in his opinion 'incomparably the best' of all of his writings, see Albert *et al,* eds. (1988), 162.

> important though they were, who is principally responsible for its emergence.'[67]

Hume, naturalist though he was, drove a small wedge between the 'is' and the 'ought', thereby outlawing logical naturalism. If the above interpretation of Kant is correct, he split the two completely apart, implying that 'ought' is not only *underivable* from any 'is', but is *indefinable* in terms of any naturalistic 'is' as well.

This claim was made explicitly in the next century by one who admitted to having been greatly influenced by Kant's ethical writings, although he departed from them: Henry Sidgwick.[68] To the question of 'What definition can we give of "ought"?', Sidgwick answered in his book *Methods of Ethics* that the idea is 'too elementary to admit of any formal definition'.[69] Of course, this goes far beyond an argument against semantic naturalism. It argues against any semantic theory of ethics, whether naturalistic or not. For this reason, Sidgwick and others of this belief can be linked to the Plato of the *Euthyphro*, who argued against several proposed definitions of the term 'holiness'.[70] Those definitions could not be seen as naturalistic (if this term can be anachronistically used here), since each definition involved 'the gods'.[71] For Sidgwick and others of his view, though, Plato's arguments in that dialogue are relevant to modern moral philosophy because modern definitions of moral terms can be scrutinised just as critically. In the years following Sidgwick's writings such scrutiny, especially of *naturalistic* definitions, became a large part of moral

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[67]P. Simpson (1987), 125.

[68]Sidgwick (1874), Preface to the 6th edition, explains his indebtedness to Kant among others.

[69]ibid., 32.

[70]Plato, *Euthyphro*, 5c-6e. Plato's term, ýH4@<, has the sense of 'sanctioned by divine or eternal law', as opposed to being sanctioned by human temporal law, so the discussion of this term's definition is more relevant to ethics than might appear from the translation 'holiness'. Aside from this, the use of the word 'define' here is technically different from certain uses in modern semantics (see Allen (1984), 33-39), but it nevertheless bears enough similarity for the connection, which is often made (e.g. Pigden (1991), 426).

[71]Plato, *Euthyphro*, 6e, 9c, 12e, 14b.

philosophy. Sidgwick himself did not bring prominent criticism to semantic naturalism, however. Rather, it was a student of his[72] who did so, beginning the twentieth century with a work which has had a profound influence on the state of naturalism.

2. MOORE'S OPEN QUESTION ARGUMENT

a. Principia Ethica

This was the name of the seminal work; its author was the Cambridge philosopher George Edward Moore.[73] In the first chapter of this work, Moore credits Sidgwick (already having endorsed his general ethical approach, known as 'Intuitionism'[74]) with being the 'only one ethical writer... who has clearly recognised and stated this fact', that 'good' is indefinable.[75] Here the emphasis will be to show how Moore argued against *semantic naturalism* in particular, not against *all* ethical definitions. In fact, although Moore does devote a chapter in *Principia Ethica* to ethical theories which were semantic but not naturalistic, his primary negative intention in the book, by his own admission, is to refute those theories of ethics which confuse '"good", which is not... a natural object, with any natural object whatever'. To underscore this intention, he names the general confusion the 'naturalistic fallacy', though claiming the fallacy to affect many more than just naturalistic theories.[76]

G. E. Moore criticised naturalists for refusing to see that 'good' was one of those 'notions of that simple kind, out of which definitions are

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[72]Albert *et al*, eds., (1988), 279.
[73]Among the works which appraise the profound influence of this work on the moral philosophy of this century are M. Warnock (1960); P. Levy (1979); Hudson (1980); T. Baldwin (1990); and Darwall, Gibbard, and Railton (1992), 115-124.
[74]Moore (1903), x.
[75]ibid., 19. Moore was not in such admiration of Sidgwick in some other respects, however. The majority of the largest chapter of the book is devoted to arguing against Sidgwick's hedonistic ethical theory.
[76]ibid., 13.

composed and with which the power of further defining ceases.'[77] As with Hume's Law, there is an oft-quoted passage (or a passage with oft-quoted portions) which roughly outlines his view on this issue:

> 'If I am asked "What is good?" my answer is that good is good, and that is the end of the matter. Or if I am asked 'How is good to be defined?' my answer is that it cannot be defined, and that is all I have to say about it... if I am right, then nobody can foist upon us such an axiom as that "Pleasure is the only good" or that "The good is the desired" on the pretence that this is "the very meaning of the word"...My point is that 'good' is a simple notion, just as 'yellow' is a simple notion; that, just as you cannot, by any matter of means, explain to anyone who does not already know it, what yellow is, so you cannot explain what good is. Definitions of the kind that I was asking for, definitions which describe the real nature of the object or notion denoted by a word, and which do not merely tell us what the word is used to mean, are only possible when the object or notion in question is something complex. You can give a definition of a horse, because a horse has many different properties and qualities, all of which you can enumerate. But when you have enumerated them all, when you have reduced a horse to his simplest terms, then you can no longer define those terms. They are simply something which you think of or perceive, and to anyone who cannot think of or perceive them, you can never, by any definition, make their nature known.'[78]

Several writers have claimed that this argument 'does not impress me, because I do not find accounts of it coherent',[79] or have excused their neglecting it with an animadversion to the effect that it is 'entirely controversial'[80] or 'has lost a great deal of its force in the last few years'.[81] These comments exemplify the confusion that still sometimes surrounds this passage and others in *Principia Ethica*. Such confusion is understandable, for two elements of Moore's critique of naturalism are necessary to an

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[77] ibid., 8.
[78] ibid., 6-7.
[79] Anscombe (1958), 27.
[80] W. Fox (1990), 189.
[81] Wilson (1980a), 431.

understanding of this passage but are not thoroughly explained before this point in the book: the epistemological position from which he launches the criticism, and the semantic nature of both his argumentation and the position against which he argues. Both elements will be discussed here in turn.

b. *The epistemology behind the argument*

Perhaps the adjectives of Moore's notion of *good* that are most relevant to his critique of naturalism are 'simple', 'irreducible', 'indefinable', and 'nonnatural'-- four words which certainly convey a general idea, but not necessarily a precise representation, of his view. The first three of these words are interconnected, and can be explained clearly with reference to the seventeenth century philosopher John Locke. Locke's idea of epistemology, as found in *An Essay Concerning Human Understanding*, are paraphrased (without mention) in the first chapter of *Principia Ethica*, where Moore's position is outlined.[82] Moore's endorsement of Locke's epistemology is not a peculiar occurrence: at least one study supports 'the correctness of the statement that Locke changed man's way of thinking' with regard to knowledge.[83] The Oxford philosopher Gilbert Ryle wrote that 'one cannot pick up a sermon, a noel, a pamphlet, or a treatise and be in any doubt, after reading a few lines, whether it was published before or after the publication of Locke's *Essay*'.[84] If there is any peculiarity in Moore's case, it is not that he held Locke's view of epistemology, but that he made certain idiosyncracies of it do so much work, as will be shown.[85]

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[82]Parallel passages include Moore (1903), 7-8, 16 with Locke (1689), III.i-ii, IV.vii; and Moore p.6 with Locke III.iv. Others are cited hereafter.
[83]Schouls (1980), 3.
[84]Ryle (1967), 3.
[85]Schouls (1980) has pointed out the significant correlations between Locke's epistemology and that of Descartes. Although the present discussion will be in terms of Locke, the possibility is open that Descartes had already proposed some or all of the relevant features of Lockean epistemology. In fact, some of the ideas have been found in some Italian thinkers of the previous (sixteenth) century, and perhaps even in embryonic form in ancient thought, as is also explained in Schouls's work.

'Reason', according to Locke, deals with the 'certainty or probability' of that which the mind deduces 'from such *Ideas*, which it has got by the use of its natural faculties, viz. by sensation or reflection'.[86] Furthermore, 'one thing is carefully to be observed concerning the ideas we have; and that is, that some of them are *simple*, and some *complex*.'[87] Of these two categories of ideas, the latter are composed of the former.[88] Two centuries later, G. E. Moore makes plain that his discussion is going to be centred on ideas, and in particular the idea of 'good'.[89] He shows his affinity with Locke by claiming that these ideas can be simple, which means they are 'just something you think or perceive';[90] or else complex, which means they are composed of a bunch of simple ideas. Moore's example of a complex idea is a horse, which 'has many different properties and qualities, all of which you can enumerate... four legs, a head, a heart, a liver, etc.'.[91]

Two logical corollaries of the Lockean *simplicity* of an idea are its *irreducibility* and *indefinability*.[92] Irreducibility, or unanalysability, is the assertion that a simple idea cannot be broken into any further components, that 'it is not composed of any parts, which we can substitute for it in our minds when we are thinking about it'.[93] If something simple is, as both Locke and Moore say, an item of thought which is not composed of any parts, it follows that it is not reducible to anything else. However, it is precisely the reduction into parts that Locke calls a definition, which is why he says that 'The names of simple ideas are not capable of any definitions'.[94] Moore entertains three understandings of 'definition':

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[86]Locke (1689), IV.xviii.2.
[87]ibid., II.ii.1.
[88]ibid., II.xxiii.1.
[89]Moore (1903), 6.
[90]ibid., 7.
[91]ibid., 7-8.
[92]Locke (1689), III.iv.4-8.
[93]Moore (1903), 8.
[94]Locke (1689), III.iv.4.

1. Definition = An approximation or indication of the idea I think you are referring to when you say a word (the 'arbitrary verbal definition').

2. Definition = An approximation or indication of the idea people in general would think you are referring to when you say a word (the 'verbal definition proper').

3. Definition = The substitution for a complex idea of all of its simple components.[95]

Moore expresses his distaste for the first two, for such mundane definitions are the job of the lexicographer, not the philosopher.[96] The third, eminently Lockean, understanding of 'definition' is that which Moore chooses; this, he says, is 'what I mean, when I say that good is indefinable'.[97] An indefinable term, for Moore, was a term which could not be substituted with any simple components. Considering that good, if simple, could not possibly have any components besides itself, it is perfectly understandable why Moore would call good indefinable. Thus, the indefinability of good follows directly from its irreducibility, which follows from its simplicity.

The fourth character of Moore's idea of good is 'nonnatural'. To understand this, one must look first to Moore's definition of the 'natural'. He defines this in three ways:

1. Natural = 'something of which the existence is admittedly an object of experience',[98]

2. Natural = 'that which is the subject-matter of the natural sciences and also of psychology',[99]

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[95]Moore (1903), 8.
[96]ibid., 6.
[97]ibid., 8.
[98]ibid., 38.
[99]Note: those who have been cited (in section B.1, 2) as believing that contemplation of natural objects psychologically yields moral conclusions are not necessarily doing any *defining* of psychological states in moral terms.

3. Natural = 'all that has existed, does exist, or will exist in time... *by itself* in time, and not merely as a property of some natural object'.[100]

Moore's acceptance of all three of these definitions suggests his belief, at that time, that they are all equivalent, although there is evidence that the second of these was the primary.[101] However, some philosophers have chosen to centre their discussion on the third definition,[102] since the assumption that terms have to refer to something that 'exists' (in some sense) was cited by Moore as a fundamental mistake which for all semantic ethical theorists, not just naturalists, 'leads them to commit the naturalistic fallacy'.[103] Moore eventually discarded this third definition of 'natural', though, realising that many natural properties cannot exist by themselves in time.[104] In any case, 'nonnatural' describes something whose existence is determined by *some other means than* experience, and is *not* part of the subject-matter of science so understood, and does *not* exist apart from something natural with which it is associated. This 'nonnaturalness', as a fourth character of good, does not follow from any of the previously stated characters; a simple idea can correspond to either a natural or a nonnatural object or property. 'Pleasure' is an example Moore provides of something that is simple, irreducible, indefinable, but *natural*.[105] The number 'one' is an example besides 'good' of something Moore would call simple, irreducible, indefinable and *nonnatural*.[106]

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[100]The latter two definitions are found in ibid., 40-41.

[101]Kolnai (1980) and Wiggins (1993), 303, take this position, based on *Principia Ethica* as well as confirmation found in a new Preface for it which Moore never published (see C. Levy (1964)).

[102]D. Wright (1994) discusses the naturalistic fallacy in terms of the doctrine that 'all propositions assert a relation between existents'. This approach is also evident in this century's arguments against 'descriptivism' in ethics (on which see subsection 3b, below).

[103]Moore (1903), 124-126.

[104]Moore (1942), 581.

[105]Moore (1903), 13.

[106]Moore calls numbers nonnatural in (1903), 111-12; presumably the number 'one' is simple, and the other two adjectives follow.

One more aspect of Moore's position is essential to an understanding of his critique of naturalism. Locke said that there can never be any dispute about which idea is in one's own mind, whether it be simple or complex, for ideas admit of no confusion or lack of understanding when there is any understanding of them at all. In his own words, 'Whoever reflects on what passes in his own mind, cannot miss it.'[107] Again, 'For let any idea be as it will, it can be no other but such as the mind perceives it to be; and that very perception sufficiently distinguishes it from all other ideas, which cannot be other, i.e. different, without being perceived to be so'.[108] Moore concurs; if good is an idea, and ideas are in the mind, then 'Everyone does in fact understand the question "Is this good?". When he thinks of it, his state of mind is different from what it would be, were he asked "Is this pleasant, or desired, or approved?"'. Moreover, 'Everybody is constantly aware of this notion' of good.[109] Moore does, however, allow for the possibility that one 'may never become aware at all that it is different from other notions of which he is also aware'.[110] One knows exactly what the idea of 'pleasure' is, and would never be in doubt as to whether it was pleasure or some other idea that was before his mind. One also knows precisely what 'good' is, and likewise could not second-guess himself and not be sure whether that simple idea he had in mind was 'good' or not. However, there is no saying that one will always realise that these two ideas, pleasure and good, are *different* ideas and not the same thing. The reason for this is that the person has not taken the two ideas into mind together, and strived to notice the difference in state of mind which they produce upon contemplation. To make an analogy, a certain person *P* might think two wines *w1* and *w2* to be identical in taste, without ever having had a glass of each next to the other to compare

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[107]Locke (1689), II.ix.2.
[108]ibid., II.xxix.5.
[109]Moore (1903), 16-17.
[110]ibid., 17.

directly. As soon as *w1* and *w2* are tasted in succession, however, any perceptible differences will immediately become apparent. Thus, Moore endeavours in *Principia Ethica* to provide a means by which people can assay 'good' alongside any other idea of which they are also aware but which is erroneously thought to be the same as 'good', and thereby distinguish one from the other. What is supposed by Locke and Moore to be impossible, however, is that one could believe that one has 'good' before his mind, and that he could in actuality be mistaken, and be thinking of 'pleasure'.[111] This is where the analogy with wine breaks down, for people might often believe that they are drinking one wine when they are actually drinking another. Lockean-Moorean ideas are the very elements of an individual's knowledge and thus do not admit of such ambiguity. There is no possibility whatsoever that an idea in one's awareness could be confused with another one at the very moment it is being thought. This would entail a contradiction: since ideas are by definition the components of knowledge, confusing one conscious idea for another would be saying that something was at the same time known and not known.

This is a rough outline of Moore's epistemological position, from which he launches his critique of naturalism. By its lights one can make much more sense of the renowned passage cited several pages above; for many terms featured there, such as 'simple', 'meaning', 'definition', and 'notion' (a synonym for 'idea'), would otherwise be too vague for his position to be understood.

c. *The argument*

Moore's argument against naturalism in *Principia Ethica* is interwoven with his scant description of his own position, which is likely an

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[111] That Locke would share this belief is evident from (1689), II.xxix.

important reason why he has been misinterpreted or misunderstood. The crux of his complaint is that naturalists (and some others) define the term 'good' with terms like 'pleasure' or 'approval' or some other concept other than good itself:

> '...far too many philosophers have thought that when they named those other properties they were actually defining good; that these properties, in fact, were simply not "other", but absolutely and entirely the same with goodness. This view I propose to call the "naturalistic fallacy", and of it I shall now endeavour to dispose.'[112]

According to Moore these philosophers have, like our wine-taster *P*, had something *w1* in mind, and supposed it to be no different from *w2*. Of course, in order to prove this, Moore had to develop a tool with which one could distinguish two ideas; otherwise his claim that they are different would be completely on a par with another's claim that they are the same. So, he developed the *Open Question Argument*. This involves first entertaining one idea before the mind, and then bringing another alongside it. If asking whether the one idea was the same as the second idea is immediately recognised as a tautology, then the ideas must be the same. However, if one could reasonably ask the question without incurring a tautology, i.e. if the question is open, then the two ideas must be different (because of the impossibility of being confused about one's own ideas while one is thinking them).[113] As with the epistemology behind the argument, Locke had actually already framed an embryonic version of the Open Question Argument, encouraging his readers to compare the idea of 'the taste of a pine-apple' with any other idea to see that it is actually something distinct.[114]

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[112]Moore (1903), 10.
[113]ibid., 15-16.
[114]Locke (1689), III.iv.11. This (original?) point is yet another illustration of the indebtedness of Moore to Locke.

To illustrate the operation of the Open Question Argument, one may remove the area of breakdown of the wine example by supposing that *P* is such a perfect wine-taster that he can recognise a wine upon tasting it as perfectly as we (according to Locke and Moore) can recognise an idea when it comes into our heads. *P* may forget which wine is which if he doesn't have it there to taste, just as we can be at a loss to recall what a certain idea was once we are not thinking about it anymore; but while he is tasting, *P* can name the wine with no margin of error. Now let us suppose that this wine-taster is under the impression that two wines *w1* and *w2* are the same wine, because he has tasted them both at different times, and does not remember the one he is not tasting enough to distinguish it from the one he is tasting. When another taster tells *P* that this is not at all the case, and that the two wines are different, *P* places them next to each other and tastes them in succession. Being able as he is to name perfectly a wine he is tasting, *P* is able to name one and then name the other. By doing so he learns whether the wines are indeed different or the same.[115]

Moore chooses to make an analogy not with taste and wine, but with sight and colour.[116] Either of these analogies might suggest various features which might be inconsistent with each other or even with Moore's idea of good. Moore does not claim goodness to be realised by a person in the same way that either tastes or sights are, however. The only suggestion

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[115]A potential problem with this example is that *P* must taste the wines at different times, and could theoretically forget which wine *w1* was as soon as he tasted *w2*. This is not a point of breakdown for the analogy, however, because if it is a problem for the wine-taster, it is also likely to be a problem for Moore. Moore's discussion suggests that we cannot entertain two ideas before the mind at the exact same moment, for having an idea before the mind creates a unique 'state of mind', unlike that created by the presence of any other idea (Moore (1903), 16-17). If this is the case, one can theoretically bounce back and forth between 'good' and 'pleasure', repeatedly entertaining each before the mind and repeatedly forgetting the state of mind corresponding to one as soon as it is replaced in the mind by the other. A possible way out for a Lockean like Moore is to allow for a person to sense a *change* in state of mind when a new idea replaces the old. In the wine-tasting example this could work as well, allowing *P* to sense a *change* in taste as a new wine replaces the old still on his tongue. (Admittedly this analogy shows little respect for the actual methods of wine-tasting...)

[116]ibid., 10, 14-15.

of similarity being made by either of the analogies is that one has immediate recognition of one's own tastes and sights as well as one's own ideas, such as goodness.[117] If a person thinks 'good' to be the same thing as 'pleasure', the Open Question Argument will help us solve the problem by having us first conceptualise pleasure, and then good. By asking 'Is pleasure the same as good?', or the adjectival form 'Is pleasure good?', we will realise whether we are asking about two ideas, or only one. The former is the case if 'Is pleasure good?' were seen to be an open question. The latter is the case if 'Is pleasure good?' obviously reduced to 'Is pleasure pleasant?', which is a tautology. The reason this would be obvious is because Moore is talking about ideas currently in one's consciousness, and for one to be in confusion about them would be self-contradictory.

This argument, however, cannot rule out every possible definition of 'good' at once, any more than our wine-taster can rule out any wine being the same as that in the bottle he has in front of him, unless he compares all of them. Thus, Moore says that

> 'if he will try this experiment with each suggested definition in succession, he may become expert enough to recognise that in every case he has before his mind a unique object, with regard to the connection of which with any other object, a distinct question may be asked.'[118]

By 'connection' Moore means a semantic connection, or a connection having to do with defining one object in the mind in terms of another. Moore himself encounters a few alleged definitions of 'good' over the course of about a hundred pages, but leaves to us the continuation of this analytical process which the Open Question Argument has facilitated.

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[117] Implicit here is Moore's belief that the idea of 'good' will be the same for everyone, which may be seen as a belief in a certain kind of 'objectivity' in ethics (see Moore (1903), xi; (1922), 254-59).

[118] ibid., 16. See also S. Ball (1988), 209, who calls us to realise that induction in this matter may be fallible.

Being concerned as it is with definitions and identities based solely on the meanings of words, Moore's argument only attacks *semantic* theories. This point may not be clear in certain passages, but this is at least partly due to the fact that 'In those days, the philosophy of language was not very far advanced',[119] and so some distinctions might have gone unnoticed. For example, as Hilary Putnam has noted, Moore 'conflated *properties* and *concepts*'.[120] Throughout *Principia Ethica*, but especially in the first chapter, Moore sometimes calls 'good' an idea or concept, and other times calls it a nonnatural property. That the two notions are distinct is accepted by many, perhaps most, philosophers of language today.[121] Although Moore might have blurred some distinctions that in his day had not yet been clearly established, it is evident from his writing that he was arguing against forms of naturalism which attempt to identify good with another idea 'on the pretence that this is the very meaning of the word'.[122] If goodness and pleasure were actually a single property that is being referred to with two different terms, with different meanings and therefore associated with different ideas in the mind, Moore's argument as he presents it would not be able to dispute this. The Open Question Argument operates entirely in terms of ideas in the mind, which for Moore are what we consult when we wish to use language. How the words are properly used in language depends on their meanings, which depend in turn on the nature of our ideas or concepts. For Moore and for others in the analytical tradition of semantics, the organisation of these ideas or concepts is an entirely *a priori* affair. We may very well have *learned* about properties through sense experience; for example, it is difficult to imagine how we could have known about redness if we had no eyes. However, the term '*a priori*' has nothing to do with how

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[119] Rachels (1990), 70.
[120] Putnam (1981), 207.
[121] ibid.; see also Wiggins (1984).
[122] Moore (1903), 7.

an idea is acquired,[123] but how it is *justified* to be the way it is. To justify the distinctiveness of the idea of 'good', which is the aim of the Open Question Argument, Moore does not tell us to appeal to an experience of things with the property of goodness. This would be *a posteriori*. Rather, he tells us to appeal to our idea of good-- to think about good, apart from any particular experienced good things. This is *a priori*. Moore, like the semantic naturalists he criticises, believes the meaning of 'good' to be the kind of thing that is not justified on the basis of experience. On the contrary, it is fundamentally an *a priori* matter.[124] Therefore his argument belongs squarely within the traditional analytical programme, and thus is an argument particularly against the Semantic Justification.

One interesting consequence of his emphasis on the meanings of words, as with Hume's emphasis on logical validity, is that Moore's argument can be shown to be a particular application of a general rule believed to be applicable to any use of language, whether in ethics or outside of it. Hume's Law was shown earlier to be interpretable as a specific instance of the general law of the 'conservation of logic'.[125] Analogously, Moore's Open Question Argument against what he called the 'naturalistic fallacy' can be seen to be equally applicable to any definition of one term in terms of another.

> 'If anybody tried to define pleasure for us as being any other natural object; if anybody were to say, for instance, that pleasure *means* the sensation of red, and were to proceed to deduce from that that pleasure is a colour, we should be entitled to laugh at him and distrust his future statements about colour. Well, that would be the same fallacy which I have called the naturalistic fallacy.'[126]

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[123]Lowe (1995a), 43.
[124]Broad (1942), 64ff. further describes Moore's apriority.
[125]See section B.1a, 2.
[126]Moore (1903), 13.

From this humorous quotation Moore's argument can clearly be seen not to rest on a truth peculiar to ethics, although it can certainly be applied to ethics. His argument rests, rather, on what he takes to be truths about meanings of words in general. Neither colours nor pleasure are ethical terms, and yet the defining of one in terms of the other falls foul of the naturalistic fallacy. Nevertheless, Moore's *Principia Ethica* being an ethical work, he makes plain in the next sentence that he wishes to restrict his criticism there to the definition of ethical words in nonethical terms.

To sum up, what has been described here of Moore's argument in *Principia Ethica* can be distilled to two points. First, according to Moore, 'good' as a concept is fundamental in the discipline of ethics, and cannot be broken down into simpler parts, nor can it be substituted by any other notion. Any theory of ethics that attempts to do either is refuted *a priori* on the basis of the meaning of the word 'good'. Second, goodness as a property or quality is not one which is discoverable by the means employed in the natural sciences or psychology, i.e. it is a 'non-natural' property. The first of these assertions contradicts the Semantic Justification, and the second of them contradicts the definition of naturalism. If the first assertion is correct, semantic naturalism is confuted. If the second is correct, then any type of naturalism is confuted. But since Moore does not provide direct argumentation for the non-naturalness of good,[127] but does give us an Open Question Argument to support the indefinability of 'good', it is his argument against semantic naturalism which is being elaborated and assessed in this section.

d. *Qualification in later works*

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[127]ibid., 14. An argument against the naturalness of good is not an argument for its non-naturalness; after Moore an entire tradition has emerged whereon good is not a property at all, natural or non-natural, and yet our moral judgments still serve a purpose--for example, to coordinate our lives with our feelings and the feelings of others (Gibbard (1990), 64-80, 239-300).

Before examining this argument too closely, one must recognise Moore's philosophical career to have extended for a half a century beyond the *Principia Ethica* of his youth (he was thirty when it was published). Throughout his life, Moore attempted to get to the root of the matter of the nature of goodness and the prospect of defining ethical terms with nonethical terms. He expressed a wish either to justify or to move beyond the dogmatic conceptual claims he had made early in his career. Unfortunately from the perspective of a critique of naturalism, he never approached the surety of his early years. This excerpt from 1922 serves as an example of Moore's grappling with the subject:

> '[A good question is] whether when we judge (whether truly or falsely) that an action is a duty or a state of things good, *all* that we are thinking about the action or the state of things in question, is simply and solely that we ourselves or others have or tend to have a certain feeling towards it when we contemplate or think of it... I feel some doubts myself whether they are or not: it does not seem to me to be a matter to dogmatise upon. But I am strongly inclined to think that they are not merely psychological; that Moral Philosophy and Ethics are not mere departments of Psychology.'[128]

Another way Moore attempted to speak of the nature of good and morality was to explain what he thought good was *describing* about *x* when one says '*x* is good'. Here too, he was far from a solid answer to the question. He was convinced that it was of a different sort than most, if not all, other kinds of description; but, in his own words,

> '...I can't see *what* it is. It seems to me quite obvious that if you assert of a given state of things that it contains a balance of pleasure over pain, you are asserting of it not only a *different* predicate, from what you would be asserting of it if you said it was "good"-- but a predicate which is of a different *kind*... And of course the mere fact that many people have thought that goodness and beauty were subjective is evidence that there is *some* great difference of

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[128]Moore (1922), 330.

> kind between them and such predicates as being yellow or containing a balance of pleasure. But *what* the difference is, if we suppose, as I suppose, that goodness and beauty are *not* subjective, and that they do share with "yellowness" and "containing pleasure" the property of depending *solely* on the intrinsic nature of what possesses them, I confess I cannot say.'[129]

In a reply to those who criticised his vagueness as to how moral terms do and don't describe things, he admitted twenty years later that 'To make it clear it would be necessary to specify the sense of "describe" in question; and I am no more able to do this now than I was then.'[130] His inability to deal with these fundamental notions ultimately led him to question even those decrees he had made so confidently in the beginning of his career. In a paper entitled 'Is goodness a quality?', the aged Moore wrote,

> 'In *Principia* I asserted and proposed to prove that 'good'... was indefinable. But all the supposed proofs were certainly fallacious; they entirely failed to prove that [good] is indefinable. And I think perhaps it is definable: I do not know. But I also still think that very likely it *is* indefinable.'[131]

Moore certainly wished to go the full distance, and explain exactly why naturalism would not work; and the answer, he suspected, had something to do with the unique nature of goodness, something about it which set it apart from the type of information one receives from the natural sciences and psychology. But Moore never rewrote *Principia Ethica*, although he recognised that he should have.[132] Consequently, his argument there received significant criticism to which he never adequately responded. His argument ultimately was modified in response to these criticisms, though not by him.

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[129]Moore (1922), 274.
[130]Moore (1942), 591.
[131]Moore (1959), 98.
[132]Moore (1922a), xii.

3. AFTER MOORE

a. *The fall and rise of the Open Question Argument*

At least some of the shortcomings G. E. Moore saw with his argumentation were those that others, such as W. K. Frankena and C. D. Broad, were seeing, since he made many of his admissions in replies to their arguments. Many of them call into question aspects of his work that do not directly affect his criticism of naturalism (e.g. Broad's arguments against the equivalence of Moore's three definitions of 'natural', and his discussion of the status of the 'nonnatural'[133]). Others, though, such as Frankena's arguments in his paper on 'The Naturalistic Fallacy',[134] are very relevant. This paper, Frankena's first publication,[135] presents a criticism which has since become the 'standard objection to Moore's argument',[136] that the Open Question Argument is question-begging if interpreted as a decisive refutation of semantic (or, as Frankena calls it, 'definitional') naturalism as a whole. Moore had adopted a quip by Bishop Joseph Butler as his motto: 'Everything is what it is, and not another thing'.[137] This is the essence of the Open Question Argument, which is at root an appeal to ideas supposedly held in common by everyone. To this, however, naturalists can add a clause, thereby yielding the following: 'Everything is what it is, and not another thing, unless it is another thing, and even then it is what it is'.[138] The point of this is that to Moore's claim that 'Is pleasure good?' is an open question, there is, at least *prima facie,* no reason why someone cannot say, 'But it is not an open question in *my* mind. To *me* it is a tautology, for I think pleasure and goodness are indistinguishable.' If the Open Question

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[133]Broad (1942).
[134]Frankena (1939).
[135]Sankowski (1995), 289.
[136]S. Ball (1988), 198.
[137]Moore (1903), title page.
[138]Frankena (1939), 472.

Argument rests on ideas supposedly held in common by everyone, it is vulnerable to someone claiming that the idea they hold is different. To ignore this possibility is to rule out real differences in people's conception of good; but it seems possible that people may indeed have such differences.

This and many other criticisms of the Open Question Argument can be understood in the context of two general blows which have been dealt to those aspects of Moore's ethical philosophy which have been described here. First, although philosophers like W. D. Ross and H. A. Prichard produced early twentieth century philosophies which were in the Sidgwick-Moore 'intuitionist' tradition,[139] this Platonic-styled intimate (some would say esoteric) awareness of ethical principles has according to John Mackie 'long been out of favour, and it is indeed easy to point out its implausibilities'.[140] Bernard Williams writes that it 'has been demolished by a succession of critics, and the ruins of it that remain above ground are not impressive enough to invite much history of what happened to it.'[141] The cogent arguments which were offered against it between the 1950's and 1980's are indeed many.[142] Since Moore was one of those philosophers whose intuitionism was so harshly criticised, his argument against naturalism suffered insofar as it could be seen to be rooted in this untenable intuitionist perspective.[143] For example, if it was Moore's intention in *Principia Ethica*

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[139]See Prichard (1912); (1937); and Ross (1930).

[140]Mackie (1977), 39. That Moore had an affinity to Plato on this matter, see S. Clark (1980).

[141]B. Williams (1985), 94.

[142]Among them are Toulmin (1950); Hare (1952); Nowell-Smith (1954); MacIntyre (1966), 252ff, which specifically deals with Moore's version; G. Warnock (1967), ch. 2; Frankena (1973), 102-105; Mackie (1977), 36-41; Blackburn (1985); B. Williams (1985), 93-95; and Mayo (1986), 43-48. Hare continues to restate his arguments, e.g. (1981) and (1989a). Some current moral philosophers, like those of Thomas Nagel (1970); (1986); and John McDowell (1979); (1985); (1995), are sometimes characterised as 'writers in the intuitionist tradition' (Dancy (1991), 417-8), but these theories are different in important ways; for example, they include diligent explanations of their moral epistemology, or how we come to know good from bad. The alleged inadequacy of earlier philosophers' attempts at such explanation was the basis for most of the criticisms cited above. Robert Audi (1996) is perhaps closer to the 'old-line' intuitionists, but he too realises the importance of explaining the means by which a claim is justified.

[143]For examples of philosophers who criticise Moore's intuitionism in order to discredit

to show that good was a non-natural property, and yet he did not explain how we come to be aware of non-natural properties, one could interpret his argument as an indirect argument for intuitionism. Insofar as intuitionism was seen to be a weak ethical position, Moore's work would be undermined.

The second general blow was to the Lockean atomist epistemology which enabled Moore to assert the indefinability of good. The later Wittgenstein, for one, argued against the notion of 'absolute simplicity' or 'absolute exactness' with regard to our ideas.[144] According to one study of Locke's epistemology, this element of it at least has been 'by and large rejected by contemporary philosophers'.[145] A recent review of this century's meta-ethics, entitled 'Toward *Fin de Siécle* Ethics', opens with a statement that touches on both of these blows to Moore's ethical philosophy, citing as its fatal flaws the 'appeal to a now defunct intuitionistic Platonism' and 'assumptions about the transparency of concepts and obviousness of analytic truth'.[146]

Before one concludes at this point that Moore's naturalistic fallacy is 'a stuffed dragon',[147] a second look may be required. The first section of that review paper cited at the end of the last paragraph is entitled 'Principia's Revenge'. A recurring theme of the paper's seventy-five pages is the continued prevalence of issues that were raised, if vaguely, by Moore, and which in all likelihood will continue to dog naturalists into the next century. The answer to a question raised in the first page of that review, 'Why, then, isn't Moore's argument a mere period piece?', is answered there with the assertion that the Open Question Argument can still be posed intelligently

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Moore's argumentation against naturalism, see MacIntyre (1966), 252ff, and Midgley (1980).

[144]Wittgenstein (1953), I.46-7, 88f. Other criticisms of Lockean epistemology are Midgley (1980); Schouls (1980); and P. Simpson (1987), ch. 1, 6, 7. Of these, Midgley and Simpson apply their criticisms to Moore.

[145]Schouls (1980), 37.

[146]Darwall, Gibbard and Railton (1992), 115.

[147]Midgley (1980), 207.

and cogently, apart from Moore's particular way of seeing meta-ethics, epistemology, or semantics.[148] Divorcing the Open Question Argument from the less savoury aspects of Moore's philosophy is what contemporary philosophers mean when they claim that it is possible to put 'Moore's objections... on to a proper basis'.[149] The Michigan philosophers Darwall, Gibbard and Railton explain two requirements for such modification:

> 'First, one should not claim utter conviction, but merely observe that the open question argument *is* compelling for otherwise competent, reflective speakers of English, who appear to have no difficulty imagining what it would be like to dispute whether *P* is good.'[150]

So, a critic must recognise that the Open Question Argument does not rule out semantic naturalism decisively. Rather, it shows that there is controversy as to whether a certain term actually means the same thing as a moral term. This casts some doubt on the semantic naturalist's claim that the identity of meaning between two terms is inherent in ordinary language. It does not yet refute anything, however, for it is also possible that the critic has a lack of information or an inability to use his language properly. Such might be difficult to determine, but nevertheless being confident that such incompetence is not present remains a proviso for the validity of the Open Question Argument.

The second requirement for the modification of Moore's Open Question Argument, and perhaps more weighty for the would-be critic of naturalism, is that 'one should articulate a philosophical explanation of why this might be so,'[151] i.e., why a certain definition of good results in an open question and is thus dubious. Saying that 'good is good, and that is the end of the matter'[152] will do little but attract the retort that one is advocating the

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[148]Darwall, Gibbard and Railton (1992), 115-17.
[149]Wiggins (1993a), 330. See also S. Ball (1988), 207-9.
[150]Darwall, Gibbard and Railton (1992), 117.
[151]ibid. This is also asserted by Wiggins (1993), 304.
[152]Moore (1903), 6.

end of moral philosophy and moral discussion altogether. Since this is not usually the objective of the critic of naturalism,[153] one must provide a reason why the question is open. Usually this will be in the form of a distinction between the meanings of the two terms postulated by the naturalist as equivalent. To return to the wine example, the wine-taster, to be believable, must not simply state '*Y* and *Z* taste or otherwise affect me differently, and so they must be different wines', but must say something *about* the tastes or other effects of each that sets them apart from each other. The reason for this specific modification of the Open Question argument is the fact that even if two terms are equivalent by their very meanings, this is not always *obvious*:

> 'It is a familiar fact about analyses that a concept C* may constitute a correct analysis of concept C despite the fact that it is possible to think that x falls under C* and also, apparently coherently, entertain the possibility that x does not fall under C.'[154]

Two expressions can be semantically equivalent without this equivalence being immediately recognisable to anyone who looks at the two together. Some thought might be necessary. To illustrate, a definition can be provided of a 'diagonally bisected square' that is semantically equivalent to that term. That this definition is true may not be obvious, or immediately recognisable by all competent speakers of the language. One can ask, 'Is a diagonally bisected square equivalent to two isoceles right triangles in a plane sharing their hypotenuses?', and many who are not experts in geometry could see this to be very much an open question at first glance. We cannot conclude from our initial wonderment, however, that they must be two different things. It takes time and imagination to process the

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[153] Although it is not unheard of-- see Prichard (1912).

[154] Smith (1994a), 36. On pp.35-38 he explains why this must be the case, on pain of a paradox. Harman (1977), 19-20; and Darwall, Gibbard and Railton (1992), 115, 165, 177, make this point as well.

information provided in the definition and to 'see' that in fact the two expressions represent the very same figure. The role of a geometry teacher is to make students realise that such nonobvious equivalence relations are nevertheless true. They are true by virtue of the very concepts used, i.e. analytically.[155] Moore's formulation of the argument, on the other hand, assumes that these types of truths are obvious, for he expects the mind to be an automatic and more or less immediate distinguisher of concepts, as long as they are both entertained together.[156] In actuality, 'It might... take time and thought to see whether or not C* constitutes an analysis of C'.[157] Yet, in fairness to the critic of naturalism, 'time and thought' does not give a licence to the naturalist, but rather a responsibility. It is just as incumbent upon any naturalistic theory as upon a critique of it, to thoroughly explain and facilitate an understanding of the semantic equivalence relation that is supposed to (or not to) hold. If a naturalist cannot get someone to 'see' a semantic equivalence supposedly inherent in our language, and if there is no other reason to suspect that person of linguistic incompetence, then there is no reason to believe that such an equivalence is inherent in our language. This is the sense of Moore's claim that naturalism 'offers no reason at all, far less any valid reason, for any ethical principle whatever'.[158]

Thus, the Open Question Argument is vindicated from the (perceived) mistakes of Moore's philosophy if a user adheres to these two stipulations: that it be regarded as providing evidence against naturalism rather than immediate incontrovertible disproof, and that it be buttressed with some kind of explanation. Indeed, adhering to these stipulations renders irrelevant some of the most longstanding strategies for undermining

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[155]For the sake of argument in the context of semantic naturalism, the synthetic-analytic distinction is being upheld here. Although some would say that any definition, including geometric ones, are subject to revision in the light of experience, a semantic naturalist as defined here, appealing to definitions as the last word, would not be among them.
[156]Moore (1903), 16-17.
[157]Smith (1994a), 38.
[158]Moore (1903), 20.

the 'naturalistic fallacy', inasmuch as they target those areas which have been corrected.[159] The improvement also disables those criticisms which target not the Open Question Argument itself, but Moore's way of doing ethics and semantics which surrounded the argument as he presented it.[160] If the argument can, albeit in a modified form, be removed from the unwanted aspects of Moore's philosophy, a refutation of those aspects will leave the argument unharmed. This has led contemporary philosophers to say that 'Moore's argument rests on a secure foundation which Moore himself did not see clearly'.[161]

Recent years have witnessed restatement and defence of the Open Question Argument in terms which are intended to avoid the problems that plagued Moore's original formulation. The diverse approaches of those who have attempted to take advantage of this invigorated form of the Open Question Argument have perhaps only one thing in common: they criticise naturalist theories for their (alleged) inability to incorporate all of the meaning which resides in the concept of morality into a naturalistic concept or set of concepts. Many have concluded from this that the argument does not affect those naturalist theories which claim to dig deeper than the concepts we have at our disposal in conventional linguistic usage (i.e. those which allow us to change our existing concepts in light of experiential evidence). One contemporary naturalist emphasises this point:

> 'But the open question argument engages directly only those substantive naturalists who defend their accounts of moral discourse as a "philosophical analysis", since the open question test applies only to (purported) analytical truths.'[162]

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[159]For example, at least some of the five arguments listed in Frankena (1973), 98-100, are rendered irrelevant by the acceptance of these stipulations.
[160]E.g. MacIntyre (1966), 252-53; and Midgley (1980).
[161]Mackie (1977), 60-62.
[162]Railton (1993), 316. Harman (1977), 18-20, also makes this point.

'Analytical', again, is used in opposition to 'synthetic', and therefore may be seen to include both the 'logical' and 'semantic' (in the *a priori* sense), as they have been presented in this thesis. If theories of ethics claim an (*a priori*) semantic basis, they can be criticised for neglecting in the course of their naturalistic definition any aspect of morality which features in the conceptual framework of competent users of our language, whatever the criteria may be for the status of competency. Whether the Open Question Argument can be adapted to another level, and employed against theories other than analytically semantic ones, is an issue which will be presented in the next section; the peremptory answer provided in the last quote will not be the last word on this point. Less controversial, even among naturalists as the foregoing quote shows, is the claim that those who utilise the Open Question Argument on the semantic level do have a strong case against semantic naturalism. Of course, users of the Open Question Argument in this context are showing that they too hold *a priori* beliefs about morality, for the argument is at bottom an accusation that something within the *a priori* meaning of moral terms has been neglected by the naturalist. Therefore the Open Question Argument is not an argument against the possibility of *a priori* truths, for it operates within the realm of the *a priori* itself. Arguments against the possibility of *a priori* truths, although they will not be discussed here, would also, if true, refute semantic naturalism, since it relies on such truths.[163] This discussion will continue to consider semantic naturalists from their own perspective on this issue, which is to assume that *a priori* truths are possible.

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[163] As has been said earlier (ch.I.1, 2), whether and to what extent truths can be called *a priori* is hotly contested. For argumentation against the *a priori* see the works of Quine, e.g. (1951); (1969); (1990); the debate is also represented by the series of essays in Moser, ed. (1987).

Several parameters have been discussed so far, within which the Open Question Argument (OQA) must operate in order to be valid when used on the *a priori* level. The following is a summary of them.

1. That one theory has been cast into doubt by the OQA does not mean that another will. Theories must be tested one at a time, unless a new theory can be shown to be relevantly similar to those already having failed the test.

2. To avoid dogmatism that can arise when people disagree on an allegedly *a priori* matter, the OQA can not be said to disprove a theory automatically and absolutely. Rather, a semantic naturalist theory is doubtful in proportion to the significance of the dissidence to the semantic equivalence relation involved; for a semantic theory depends on features of shared language, and to the extent that a feature is not shared by competent speakers (however that might be determined), it is doubtful that such a feature really is inherent in the language.

3. Because of the nonobviousness of some analytical definitions, reasoning must support the use of the OQA to insure that it is not succeeding because of a lack of information or understanding.

4. Because of the *a priori* nature of the test, the OQA is valid only against theories which claim an *a priori* basis; namely, in the context of naturalism, those that appeal to the Semantic Justification.

b. *Contemporary reformulations*

There are many who have wielded the Open Question Argument within the above constraints. Even Moore, though he predated the explication of these constraints, occasionally operated within them. In a paper entitled 'The Nature of Moral Philosophy', he cautiously confronts the belief that 'good' is definable as a psychological state. The Open Question

Argument is there buttressed by certain distinguishing features of morality which would be compromised by such a definition: first, the possibility of disagreement among people on moral questions, and second, the assumption of an objective standard by which our moral positions are judged.[164] Alasdair MacIntyre too has argued against theories which sacrifice these same two features, claiming that the possibility for moral disagreement and the use of impersonal standards of judgment are inherent in morality.[165] Bernard Mayo, another in this particular line of argument, claims that the Open Question Argument can be used against any theory which neglects the possibility that people can be wrong about their ethical judgments.[166]

Other philosophers do not explicitly claim to be using the Open Question Argument, but their arguments can nevertheless be worded in that form. These arguments are designed to distinguish between the semantic features of the concept of morality, and the features that would be required by a certain semantic naturalist theory. MacIntyre, for example, makes a semantic distinction between the concept of morality and the concept of human needs, effectively saying that one can talk of having any kinds of needs, but it is still an open question whether or not I have a moral right to have these needs fulfilled, or whether others are obliged to help me secure them.[167] Michael Smith uses the 'commonsense distinction between justified and unjustified use of coercive power'[168] to support a refutation of two types of naturalistic theories: according to the first, "'*x* is good" means "*x* is highly evaluated by the standards of system M," where M is filled in by looking at the affective or motivational states of the speaker and constructing from them a practical system';[169] according to the second, the

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[164]Moore (1922), ch. 10.
[165]MacIntyre (1981), ch. 2.
[166]Mayo (1986), 42.
[167]MacIntyre (1981), 64-65.
[168]Smith (1995), 286.
[169]Dreier (1990), 9. This is argued against in Smith (1995), 282-287.

right course of action proceeds from having appropriate motivating attitudes, which are 'intentions to adhere to a particular agreement on the understanding that others also intend to do so'.[170] Smith's point is that if these theories cannot distinguish between justified and unjustified uses of coercive power, which seems to be very much a part of the concept of morality, we have a good reason for seeing these theories not to be accurate definitions of fundamental moral terms.

Some philosophers have turned the Open Question Argument against those who throughout this century have been among its most ardent devotees: those who believe that moral judgements cannot be true or false.[171] One can, in opposition to such writers, say that since such an account of morality does not allow for 'truth-aptness', or the quality of being able to be judged true or false, whereas moral language does seem to entail such truth-aptness, it must be an open question whether or not that expression of emotion is necessarily *moral*.[172]

Another feature of morality whose use in criticising semantic naturalism goes back at least to H. A. Prichard, is its categorical or binding nature.[173] According to Prichard and others, any proposed definition which is only hypothetical in meaning-- one which makes moral obligation something we act upon solely 'for the sake of the ends which we apply ourselves to'[174]-- is not the same concept as that of morality. Stephen Clark

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[170]Harman (1975), 13. This argued against in Smith (1995), 287-293.

[171]The classic defence of the Open Question Argument by someone of this persuasion is Ayer (1946).

[172]Arguments to this effect have been made by several philosophers, going back to Brandt (1946), 106-21; and Ewing (1947), 167-9. Recent examples of such arguments against expressivism, as well as discussions about the strength of such arguments, include Brink (1986), 36; Divers and Miller (1994); Jackson, Oppy and Smith (1994); Smith (1994a); (1994b); (1995), 278-282; and, to a weaker extent, C. Wright (1992); (1995), esp. 209-216. Disagreement arises not only from differing conceptions of what moral language involves, but also from differing conceptions of what the notion of 'truth' involves. The papers in Hooker, ed. (1996) are devoted to this cluster of issues.

[173]Prichard (1937), 94-95.

[174]Foot (1972), 313. Foot, at the time of writing this paper, believed that morality was a system of hypothetical imperatives.

uses an Open Question Argument in this way as well, asking '*ought* we to abide by nature', if nature merely provides a set of principles for the taking or leaving, rather than 'things decreed to all of us and binding on us all'?[175] This notion is similar if not identical to John Mackie's notion of 'objectivity', which he takes to be 'incorporated in the basic, conventional, meanings of moral terms'. In his influential book *Ethics: Inventing Right and Wrong*, he states that 'Any analysis of the meanings of moral terms which omits this claim to objective, intrinsic, prescriptivity is to that extent incomplete'.[176]

This talk of 'binding' and 'prescriptivity' brings one to a related, and probably the most common, objection to naturalistic theories. This objection is to theories which contend 'that an ethical judgment simply is an assertion of a fact', without any 'pro or con attitude toward what we are talking about; we are not recommending it, prescribing it, or anything of the sort'. Frankena suggests that perhaps existing moral usage should be changed to be more like this; but since arguments on the semantic level are based on linguistic usage as it is, a problem presents itself. It seems 'paradoxical if one were to say "X is good" or "Y is right" but be absolutely indifferent to its being sought or done by himself or anyone else.'[177] This idea has been called the 'action-guidingness' or the 'practicality requirement' of morality.[178] Many philosophers have employed this aspect of morality against semantically naturalistic theories in the context of an Open Question Argument, or a variation of it. Wittgenstein did so when he wrote, 'no

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[175]S. Clark (1980), 233-240.

[176]Mackie (1977), 35.

[177]Frankena (1973), 100. For a more detailed look at Frankena's moral philosophy in the context of Sidgwick and Moore see Darwall (1997).

[178]Mackie (1977), 52, calls it 'action-guidingness'; Smith (1995), 277, calls it the 'practicality requirement'. An influential work on this issue is McNaughton (1988). Wallace (1990) is a review of the ways of dealing with it. This is related to the debate over *internalism* vs. *externalism* in ethics, or the question of whether motivation or reason for action is inherent in moral considerations, or comes from outside those considerations. To an *externalist*, the 'action-guiding' argument against semantic naturalism may be unconvincing. But as it is, the most outspoken externalist naturalists today are not semantic naturalists anyway; see, e.g. Brink (1986); Railton (1986).

description that I can think of would do to describe what I mean by absolute value, [and] I would reject every significant description anybody could suggest, *ab initio*'.[179] This argument is also made by G. J. Warnock.[180] 'Description' is the key word here, for it is *descriptive* language which to Wittgenstein and others has seemed incapable of encompassing the concept of morality or, in Wittgenstein's terms, 'absolute value'. Peter Simpson writes that no matter how many facts one adds up in description of something, one will never get to the conclusion that it is good,[181] because goodness always requires a 'something more', which for Simpson is 'a certain respect or consideration' for that which is considered good.[182] Also from the perspective of action-guidingness both Gilbert Harman and Mark Johnston argue against naturalist theories of the form '*x* is morally valuable if it is valued by a person under condition K'.[183] Harman modifies the wording of the Open Question Argument, stating that a person could look at this picture of morality and say, 'So what?'; but since that same person would not say 'So what?' to a truly moral claim, this raises doubt about the naturalist's ethical theory.[184] To sum up the basis for the many arguments from the action-guiding element of morality, T. L. Carson writes:

> 'In order to succeed in justifying a moral judgment to someone it is necessary that he acknowledge that moral considerations have some legitimate claim on his actions and attitudes. A person who denies that moral considerations give him any reasons for viewing things with either favor or disfavor cannot be said to accept any moral judgments.'[185]

It is important to note that if these arguments (of Frankena, Wittgenstein, Warnock, Simpson, Harman, Johnston, and Carson) are correct, not only

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[179]Wittgenstein (1965), 11.
[180]G. Warnock (1967), 15-16.
[181]P. Simpson (1987), 162-66.
[182]ibid., 152.
[183]Johnston (1989). 156-157.
[184]Harman (1983). This was done before by Hare, as will be shown in the next subsection.
[185]Carson (1984), 26.

must a person not *deny* that moral considerations give a person a guide for action, but any ethical theory which purports to provide a nonmoral definition of fundamental moral terms must incorporate this element.

Two critics of certain areas of semantic naturalism who have provided arguments in the spirit of the Open Question Argument, but in some ways have departed from it into other more original means of critique, will be described in more detail. These are Richard M. Hare and Simon Blackburn.

c. *Arguments of R. M. Hare*

For decades, he who has been dubbed 'probably the most influential moral philosopher of his generation'[186] has criticised naturalists for their characterisation of moral judgments primarily as descriptions. In this, R. M. Hare is firmly in the tradition of the Open Question Argument, and in the spirit of Moore's own beliefs in the matter as well. Moore states that natural properties (which, again, are properties which are 'the subject-matter of the natural sciences and also of psychology'[187]) 'seem to *describe* the intrinsic nature of what possesses them in a sense in which predicates of value never do'.[188] Elsewhere he attempts to clarify this statement:

> '...there is *a* sense of the word 'describe'-- *one* of the senses in which that word is ordinarily used-- such that, in ascribing to a thing a property which is not a natural intrinsic property, you are not describing it *at all*, whereas, if you ascribe to a thing a natural intrinsic property, you always are describing it *to some extent*... To make it clear it would be necessary to specify the sense of "describe" in question; and I am no more able to do this now than I was then.'[189]

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[186]Dent (1995), 333.
[187]Moore (1903), 40.
[188]Moore (1922), 274.
[189]Moore (1942), 590-91.

Ten years after this, in his 1952 book *The Language of Morals*, R. M. Hare made plain his position on the matter, saying that the predicate 'good' is not primarily a description at all, but is 'the most general adjective of commendation'.[190] Over the next three decades, Hare developed three specific arguments against naturalism. 'Naturalism' is defined by Hare as 'any theory which is refutable by the argument which Moore used, or a recognizable formulation of that argument, that is, roughly, any theory which treats an evaluative expression as *equivalent* to a descriptive expression'.[191] Since 'naturalism' is defined by Hare in terms of the equivalence of expressions, it is a semantic type of naturalism that he is describing.[192] He also recognises the restraint that the naturalist label places on the types of properties one can discuss with moral terms: for him, they must be 'empirically observable'.[193] Significantly, he does not argue against *all* who define moral terms in nonmoral terms-- for he does this himself.[194] Rather, he argues against the main tradition among semantic naturalists: those who have used *descriptive* terms to represent moral claims.

The probable reason why descriptivism is the main tradition, and why his alternative, *prescriptivism*, has been less enticing to naturalists, is that the more one places emphasis on prescription, the less basis there seems to be on which to call one moral view 'right' and another 'wrong'. The necessity for such a distinction, moreover, seems to many to be another aspect which is inherent *a priori* in the very concept of morality. As such, prescriptivism itself is liable to an Open Question Argument; as Hare's most enduring critic, Philippa Foot, has said, according to prescriptivism

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[190]Hare (1952).
[191]Hare (1971), 4.
[192]See also Hare (1981), 2-4, where he says that logical considerations exhaust the meaning of the term 'good'.
[193]Hare (1981), 68.
[194]ibid., 3-4.

> 'One man may say that a thing is good because of some fact about it, and another may refuse to take that fact as any evidence at all, for nothing is laid down in the meaning of "good" [its being commendatory] which connects it with one piece of "evidence" rather than another. It follows that a moral eccentric could argue to moral conclusions from quite idiosyncratic premises; he could say, for instance, that a man was a good man because he clasped and unclasped his hands, and never turned N. N. E. after turning S. S. W.'[195]

Hare has attempted to distinguish right from wrong with the help of what he sees as further inherent (*a priori*) aspects of morality: the universality and rationality of moral judgment.[196] But, as debate over Hare's moral philosophy continues,[197] semantic naturalists have for the most part remained descriptivist rather than prescriptivist. This situation means that Hare's arguments against descriptivism, if sound, affect the vast majority of semantic naturalists.

Of Hare's three main arguments against naturalism, the first is that naturalism ties 'moral reasoning to the received opinions of our society.'[198] It does this by claiming that the meanings of moral terms in a certain language actually determine what is morally right and wrong. What is held to be right and wrong because of a linguistic convention, according to semantic naturalists *really is* right and wrong. If this were true, then everyone who knew their own language, and the meanings of its words, would necessarily agree on their moral opinions. Perhaps even more controversially, the received opinions of the language-group of which one is a member would be the last word on moral issues, which amounts to cultural relativism. Hare finds this idea to be inconsistent with the way we use moral language:

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[195]Foot (1958), 83.
[196]Hare (1981), esp. ch. 3, 6; and (1989).
[197]A collection of critical essays on Hare's philosophy is Seanor and Fotion (1988).
[198]Hare (1981), 69; see also Hare (1989), 102-104; and Hare (1993).

> 'It is an important feature of moral language, neglected by naturalists, that we can go on using the moral words with their same meanings to express moral opinions at variance with the received ones, as moral reformers do. This would be impossible if the moral words were tied by virtue of their very meanings to fixed properties of actions, etc.'[199]

Cultural relativism, according to Hare, is entailed by semantic naturalism, but is contrary to the meanings ordinarily ascribed to moral words. Hare does believe that 'by investigating the meanings of the moral words we shall manage to generate logical canons which will govern our moral thinking.'[200] Therefore Hare does believe in a semantic approach to morality as we have defined that term. But for the reason stated above, it is 'too short a cut', or too simplistic, to say that the meaning of a moral word describes something about an object; and that is precisely what semantic naturalists generally attempt to do. Hare's alternative is essentially that the moral word is primarily a prescription offered by the speaker rather than a description of a property. The linguistic usage in this case does not actually determine what is right or wrong, and so cultural relativism is not entailed. But, if this argument is correct, insofar as semantic naturalists are descriptivists they cannot propose a theory without contradiction. Such theories are supposed to be grounded in moral language, but moral language operates as if cultural relativism, which is implied by semantic forms of descriptivism, were false.

Hare's second criticism of naturalism expounds upon the objection that has already been mentioned, that naturalists ignore the fact that 'moral words have... a commendatory or condemnatory or in general prescriptive force which ordinary descriptive words lack'.[201] Stating an empirical fact about an object is simply a declarative statement, and could never function

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[199]Hare (1981), 69. Hare's famous illustration of the missionary landing on a cannibal island ((1952), 148-49) was used to explain this argument.
[200]Hare (1981), 20; see also p. 3-4; and Hare (1989a); (1996).
[201]Hare (1981), 71; see also Hare (1989), 107-112.

as an imperative one. Ordinary factual statements do not, according to Hare, provide the type of explicit evaluation or endorsement they must if they are to stand for everything that the words 'right', 'ought', and 'good' signify in their moral senses. Thus, naturalist theories which attempt to define moral terms in nonmoral descriptive terms are destined either to reject this prescriptive aspect of moral language, or else to fall prey to Hare's criticism that they are ignoring it. If saying a certain action is good is equivalent to making certain factual statements about it, this means that there is no explicit positive evaluation inherent in that word 'good'. If there is no prescriptive force in an expression, that expression does not convey the same meaning that 'good', 'right' and 'ought' conveys.[202]

Hare's third argument against naturalism is a response to a proposed *tertium quid* between descriptivism and prescriptivism: the view that some statements can be simultaneously descriptive of a natural quality and prescriptive of an attitude towards that quality. Here he is closest to the Open Question Argument. No matter what type of property we are talking about, Hare says, we have to ask two different questions: whether an action has that property, and whether an action with that property is wrong. Property-attributing language and commendatory language are different. Nelson Goodman would say that they were different 'versions' of speaking.[203] To answer a question of the first type still leaves a question in the second open. To think that these are the same question is a mistake. Moore called it the naturalistic fallacy; Hare simply says that it is 'mistaken, as anybody will recognise who has done some critical thinking and seen it for what it was.'[204] This critical thinking entails the realisation that whatever concept we choose to entertain, we can always utilise the concept

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[202]Hare (1971), 113. Hare (1996) argues the converse, that where the prescriptive force in moral language is recognised, moral beliefs are justified.
[203]Goodman (1955).
[204]Hare (1981), 73.

without adding on to it the evaluation which some say always (by its nature) accompanies it. In fact, we can even reverse the evaluation if we wish, without compromising the nature of that property being discussed. Hare provides an example: contrary to the belief that 'suffering' simultaneously describes actions and commits us to an evaluation, one could say of an incident at West Point Military Academy, "'He was caused to suffer deeply", but add, "All the same, there was nothing wrong in it; it happens all the time in good military academies, and that's the way to produce officers with moral fibre"'.[205] In other words, 'He suffered, and it was not wrong'. The term 'suffering' is not being misused in this sentence, although the expected evaluation ('suffering is wrong') has been reversed; so the evaluation cannot be inherent in the concept. Hare goes on to say that this type of argumentation works with any concept that has ever been presented to him.

In addition to making these arguments, and variations of them, Hare has more recently proposed an explanation of the linguistic roots of our mistake in this matter. He claims that our distrust of abandoning descriptive talk in morality can be traced to idiosyncrasies of our own language, and even more importantly those of ancient Greek. Our philosophical tradition relies heavily on its beginnings in Plato, but since the Greek language, or at least most of Plato's use of it, 'did not clearly distinguish between *what exists* and *what is true*', and tended to treat all nouns and even some adjectives (such as 'good') as existent objects, we tend to do so as well.[206]

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[205] ibid., 74.
[206] Hare (1991). The quote is from p.36.

Whether or not this explanation is accurate,[207] Hare's criticism of semantic naturalists of the descriptivist sort still stands.

Unfortunately for semantic naturalists, many philosophers have sided with Hare on the matters discussed in the last few paragraphs. Walter Sinnott-Armstrong has described a 'Regress Argument', which hinges on the truth of Hare's second argument that moral judgments are inherently prescriptive,[208] and which threatens to refute any naturalist theory. Hilary Putnam has implicitly endorsed Hare's third argument by stating that to whatever extent naturalists are physicalists (or believe that what is real must in some sense be *physical*), and since 'moral-descriptive language and physicalistic language are extremely different "versions", in Goodman's sense', it is likely that 'the *concept* "good" may not be synonymous with any physicalistic concept', and this erects a difficult barrier for semantic naturalism to overcome.[209] Whether or not Hare's three arguments and related ones by other philosophers are conclusive refutations of semantic naturalism, at least of the descriptivist sort, they certainly provide obstacles to such a view.

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[207]Note that to claim that Plato does assume that objects of knowledge exist, and on the other hand to claim that this reification is to any extent a result of his ignorance of peculiarities of the Greek language, are two different points, which must be supported by two different kinds of evidence. To determine whether the former claim represents the full extent of Plato's understanding one might look at *Timaeus* 27d-29c, where it seems that some distinction is made between truth and existence. Regarding the latter a starting point is *Phaedrus*, esp. 277-9, where Plato does show some awareness of the idiosyncracy of language and the necessity of being aware of its effect on one's beliefs. Perhaps more useful than either of these, though, for both issues, is the *Sophist*, much of which is dedicated to the relationship between language and metaphysical questions. See, e.g., 237-40 for a discussion of the ways in which 'is' can be understood, and 262-4 for a description of the uses and significance of nouns. An inconsistency to avoid, which may or may not be a problem in Hare, is the criticism of *Plato's* treatment of objects of knowledge and the use of nouns in terms of *our* understanding of 'existence'.

[208]Sinnott-Armstrong (1996), 9-14. Premise #5 (out of 10) of his argument depends on the truth of Hare's claim, which he links to Hume's Law. Interestingly, Sinnott-Armstrong believes (p.11n) that Hare is himself susceptible to the argument as well, since Hare believes moral prescriptions can be derived from nonmoral prescriptions, which is also (according to Sinnott-Armstrong) a leap that cannot be justified. Sinnott-Armstrong claims to find such an unjustifiable leap in Hare (1996).

[209]Putnam (1981), 207. An explanation of 'versions' in language, again, can be found in Goodman (1955). On the general assumption of physicalism on both sides of debates about naturalism, see S. Ball (1991), esp. p.10.

d. *Arguments of Simon Blackburn*

Another philosopher of language who has criticised semantic naturalism is Simon Blackburn. He, like Hare, has remained close to the Open Question Argument in some respects, but has produced an original approach to the matter which has received significant attention from meta-ethicists in the last two decades.[210] Partly, this attention is due to the particular area of his emphasis. Unlike Hare, who has centred his arguments on the conceptual distinction between ethical descriptivism and nondescriptivism,[211] Blackburn has chosen to argue not primarily in those terms, but in terms of ethical realism vs. antirealism. Ethical realism is defined in various ways, but is roughly the view 'that there are moral facts and true moral propositions whose existence and nature are independent of our beliefs about what is right and wrong'.[212] Another definition is that 'moral qualities such as wrongness, and likewise moral facts such as the fact that an act was wrong, exist *in rerum natura*'.[213] This definition clarifies the connection that realism can have with naturalism. Qualities and facts are, for a naturalist, subject to the requirement that they be accessible to science. Moral qualities and facts therefore must be, for a naturalistic realist, qualities and facts that can be described from a scientific point of view. Since realism has been a prominent focus of discussion in moral

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[210]For instance, the Introduction to Smith, ed. (1995) interprets all of the papers in the collection as various attempts to overcome arguments presented by Blackburn.
[211]Hare defends this approach in (1989a).
[212]Brink (1986), 402.
[213]Hare (1989a), 84. Hare makes plain that he is not a moral realist there and in Hare (1993).

philosophy in recent years,[214] Blackburn's criticism of it, and his proposal of a gap-bridging 'quasi-realism', has been very relevant.

In arguing against realism, Simon Blackburn has produced arguments which are forceful against a great deal of naturalist theories, since the realism that has been gaining in popularity in recent years is largely a *naturalist* realism.[215] A prominent and recurring argument of his is based on the familiar action-guiding element to morality, which he, in a similar way to several other philosophers already discussed, accuses naturalistic realists of neglecting.[216] Another of his arguments, also very influential, is different from those that have been described so far, and will be briefly summarised. Blackburn claims that as a philosopher of language he has come to recognise two things as conceptual truths; but that when taken together, they prohibit a naturalist from being a realist. First,

> 'It seems conceptually impossible to suppose that if two things are identical in every other respect, one is [morally] better than the other... [so] it seems conceptually or logically necessary that if two things share a total basis of natural properties, then they have the same moral qualities.'[217]

This is claimed as an *a priori* truth based on an analysis of the concept of morality. Blackburn nicknames this the 'supervenience' of the moral on the natural, after Hare's use of the term in the same way.[218] His other claim is the following:

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[214]See Railton (1986); the collection of papers delivered at the Spindel Conference 1986: Moral Realism, in *The Southern Journal of Philosophy* 24(1986), supplement, which contains an extensive bibliography to that date; the collection of papers in Sayre-McCord, ed. (1988), esp. Boyd (1988); Brink (1984); (1986); (1989); Gibbard (1990); Horgan and Timmons (1991); Smith (1991); Timmons (1993); Blackburn (1993); the articles in *Analysis* 54(1994); Smith, ed. (1995); and Railton (1996), which contains a 'taxonomy of realism' in general, and then relates the general idea to morality specifically.

[215]Horgan and Timmons (1991), 447-457.

[216]Blackburn (1984), 187-9; (1988); (1995). For the 'action-guidingness' argument see the citations of Frankena, Wittgenstein, Warnock, Simpson, Harman, Johnston, and Carson in subsection b, and Hare's second argument in subsection c.

[217]Blackburn (1984), 183-4.

[218]Hare (1952), 80-1.

> 'But it does not seem a matter of conceptual or logical necessity that any given total natural state of a thing gives it some particular moral quality. For to tell which moral quality results from a given natural state means using standards whose correctness cannot be shown by conceptual means alone.'[219]

Blackburn is pointing out here that if one enumerated all of the natural properties of a thing, one would not find any moral qualities, such as rightness or wrongness, among them. Perhaps a more precise way of saying this is that if all a thing's natural properties were described verbally, one would not yet have said 'it is right' or 'it is wrong', or anything else which means the same as these statements. If one were to provide a complete analysis of the natural property-terms that can be used in relation to that thing, no moral conclusions would be among the results. It is therefore not, according to Blackburn, by *conceptual* means, in other words by philosophical analysis of concepts, that one arrives at moral conclusions. If two people disagree as to whether lying has the property of wrongness, for instance, this does not necessitate that at least one of these people is incapable of providing a correct natural explanation of 'lying'. This is why Blackburn says the standards by which we judge the moral quality of something like lying are not solely conceptual in nature. It is not conceptually impossible for two people to have the same concept of 'lying' in mind, and to have an equal conceptual understanding of all other relevant natural properties, but nevertheless to disagree about whether a moral property attaches to lying.

These two claims, taken together, create a dilemma for a semantic naturalist who wishes moral qualities to be factual matters. The first claim finds a conceptual link between moral qualities and natural properties, such that the first cannot vary without the second varying. The second claim

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[219]Blackburn (1984), 184.

discards such a link, for there is nothing about natural properties that conceptually requires us to accept the moral quality as supervenient. Where B* is a complete natural description of a thing, and A is its supposedly supervenient moral quality, Blackburn asks, 'Why does one B* having A suddenly necessitate that all other B*'s also have A, when otherwise they would not have to?!'[220] It seems that a semantic naturalist must discard either one or the other of the conceptual truths in order to avoid the dilemma; but these have been claimed by Blackburn as *a priori* truths, inherent in the very meanings of the words used. A semantic naturalist must either show there to be an error somewhere in Blackburn's account, or else submit to the dilemma imposed by ordinary language, the very source from which semantic naturalists claim to derive support for their style of ethical theory.

4. RESULTS: THE PRESENT STATE OF SEMANTIC NATURALISM

a. *Civil war*

Nearly two dozen philosophers, most significantly Moore, Hare and Blackburn, have been cited in this section as arguing against certain theories or ranges of theories within semantic naturalism. Some of these philosophers are semantic naturalists themselves, of course, and are arguing against specific groups within that category (e.g. groups of semantic naturalists who also happen to be realists, or descriptivists, or expressivists). Thus, many of these arguments may be seen as representing a 'civil war' among semantic naturalists, where different variations of the same general

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[220] ibid. The foregoing argument is also found in Blackburn (1971). It is not clear from either of these papers, however, whether Blackburn includes contextual information as part of the natural description of a thing. If he does not, this puts an additional constraint on his first conceptual truth above: context doesn't matter. If he thinks it could matter (as is perhaps more likely), then in the statement just quoted 'all other B*'s' includes a requirement that the context be identical in any relevant way.

argument are tossed back and forth among camps within semantic naturalism. One group of semantic naturalists may use one concept supposedly inherent in moral language, such as truth-aptness,[221] to refute the theories of another group, who are meanwhile using another concept, such as action-guidingness,[222] to refute the first group. For another example of this situation, Michael Smith claims Gilbert Harman's semantic theory to be false because it cannot distinguish between justified and unjustified uses of power,[223] whilst Harman criticises any theory where moral terms are defined as the evaluation or desire of a person in a specific ideal state, of which Smith's theory is an example.[224] Smith's and Harman's arguments each depend on a specific feature which is claimed by its proponent to be revealed by an analysis of the concept of morality.

The commonality among all of the arguments offered thus far against semantic naturalism, whether the critics are themselves semantic naturalists or not, is that they claim their opponents' nonmoral definitions to have failed to incorporate all of the features which an *a priori* analysis of a moral concept reveals as inherent in its meaning. Those who adapt the Open Question Argument claim that an *a priori* consideration of a moral concept involves the recognition of a feature which is not found upon such analysis of another, non-moral, concept. Hare's arguments assert that an analysis of moral language leads one to the conclusion that there is an element of prescriptivity to moral judgement which cannot be comprehended by any descriptivist theory. Blackburn's argument basically states that an analysis of moral language reveals two conceptual truths that, if both are true, prohibit naturalistic realism. These philosophers, therefore, are all arguing against semantic naturalism from a position *within traditional (i.e.*

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[221] e.g. Ewing (1947), 167-9; and Smith (1994); (1994b).
[222] e.g. Hare (1952); and Harman (1983).
[223] Smith (1995), 287-93.
[224] Harman (1983). For a description of Smith's theory, see I.B.2b.

analytical) semantics. Their arguments give semantic naturalism the benefit of any doubts that the analytic/synthetic distinction is workable and relevant to morality, and that a study of the meanings of moral terms in ordinary language is worthy of being treated as the foundation for debate on meta-ethical issues, such as whether naturalism is true. However, as the 'civil war' among semantic naturalists shows, analytical philosophers have not reached a consensus as to the features that constitute the 'ordinary language concept' of morality; or, at least, they have not reached a consensus as to the requirements that such features place on ethical theory. This predicament provides *prima facie* evidence for entertaining one or the other of the doubts of which semantic naturalists have thus far been given the benefit. To this situation in moral semantics, naturalists have cultivated at least two general schemes of response in recent years.

b. *Response: platitude systematisation*

One response to the internal disarray among semantic naturalists as well as the attacks that have come from outside, is an attempt to increase the care that is taken in the analysis of moral concepts. David Lewis has been an advocate of this response for nearly three decades. In a paper entitled 'How to Define Theoretical Terms' he introduces a complex process by which all the imaginable platitudes regarding a certain concept, or truths that demonstrate our knowledge of that concept, can be systematised into a definition.[225] Michael Smith provides several examples of such platitudes with regard to morality, and finds that many of them fit into five general categories:

1. practicality of moral judgment
2. objectivity of moral judgment

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[225]D. Lewis (1970); see also (1972).

3. supervenience of the moral on the natural
4. substance of moral claims
5. epistemic procedures[226]

For example, one among several platitudes offered by Smith in the 'objectivity' category is: 'When A says that N-ing is right, and B says that N-ing is not right, then at most one of A and B is correct'.[227] This general scheme of platitude systematisation has recently been defended by a few semantic naturalists. Some of these are closer to Lewis's original approach (as well as that of his predecessors Ramsey and Carnap) by attempting an *explicit* and *reductive* analysis.[228] Such an analysis is *explicit* if it works by stringing all of the platitudes in a line and incorporating all of them into one definitive statement, which is then simplified. Simplification is made possible early in the process by wording the platitudes in as many of the same terms as possible. Such an analysis is *reductive* if the term to be defined is not allowed to be present in the platitudes. Other semantic naturalists have chosen an *implicit* and *nonreductive* route.[229] Such an analysis is *implicit* if it attempts to summarise rather than enumerate all of the platitudes; and it is *nonreductive* if it allows the term to be defined to feature in the platitudes.

There are at least five problems for this response, however:

1. A practical problem is that there is still substantial 'civil war' even among users of such sophisticated analytical techniques, which seems to indicate either widespread lack of mastery of language, or else the failure of analysis. Michael Smith argues against David Lewis's conclusion that

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[226]Smith (1994a), 39-40.
[227]ibid., 39.
[228]e.g. D. Lewis (1989); and Jackson (1992). The other works referred to are Ramsey (1931) and Carnap (1963).
[229]e.g. Smith (1994a), ch. 2.

valuing is 'desiring to desire',[230] whilst Lewis specifically criticises any theory which primarily involves a belief, which Smith's theory does.[231] Furthermore, Smith and Lewis profoundly disagree on the platitudes that inform their definitions: one of Smith's platitudes under the category of 'objectivity' is 'Whether or not N-ing is right can be discovered by engaging in rational argument'.[232] Lewis, on the other hand, proposes a 'conditionally relativist' theory on which there is no guarantee that there is any prospect for an objective moral decision procedure, much less one based on reason; and his ideal conditions include reference only to imagination, not to rationality.[233] The point here is that the response of platitude systematisation has not achieved its goal, which was to alleviate the internal difficulties within semantic naturalists analysing moral language. Among those who have chosen this sophisticated analytical technique, there are still just as great differences of opinion as to what features are inherent in the ordinary language concept of morality. One is forced by situations like this to conclude that what are called 'platitudes' are not so platitudinous as they are sometimes represented, which brings us to the second problem.

2. The statements which form the groundwork for this type of analysis are called 'platitudes'. However, as evidenced by difference of opinion among semantic naturalists, these statements themselves are often very controversial (representing specific positions on various types of objectivity-subjectivity issues, action-guiding issues, epistemological issues, etc.). Therefore their status as platitudes is highly dubious, and their

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[230] ibid., 146-7.
[231] D. Lewis (1989), 115. Smith's theory involves a belief *about a desire*; but, by Lewis's account it is still conceptually possible to be indifferent about what we believe that we might desire in a certain condition.
[232] Smith (1994a), 39-40.
[233] D. Lewis (1989), 114, 121.

representation as such may even be question-begging.[234] For someone who disagrees with a certain 'platitude', there seems no reply save that the person does not have mastery of the concept; but such remarks can (as in the case of Lewis and Smith) be just as easily delivered in both directions.

3. The Open Question Argument, within the parameters already mentioned, is no less operable against such a theory. Regardless of the level of sophistication at which analysis proceeds, if the fundamental 'platitudes' are opposed by other philosophers, this provides leverage for an Open Question Argument. For instance, there is nothing about the new analytical method which makes the action-guidingness of morality any less problematic for a descriptivist, or the supervenience relation any less problematic for a realist. This is especially the case because the platitudes provide the raw materials for, and are not the result of, the analytical method; and so many questions and controversies can arise regarding those platitudes regardless of what method is employed afterwards.

4. The fourth problem that faces these new-styled analytical theories affects particularly those of the explicit, reductive type. This type, according to Smith who for this reason abandons it, is affected by an analytical defect known as the 'permutation problem': the platitudes available are so few and vague that 'when we strip out all mention of the terms that we want analysed from a statement of the relevant platitudes', then there does not seem to be 'enough left in the way of relational information to guarantee that there is a unique realization of the network of relations just in case the concepts we are analysing really are instantiated'.[235] It seems that reducing moral language in this type of analysis tends to reduce the definition to something which is grossly

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[234]Stephen Ball (1991) develops (pp.15-21) and defends (pp.22-30) a test for analyticity designed in order *not* to beg the question in this way. However, his conclusion is that such a test does not end up supporting semantic naturalism, but rather shows it to be fundamentally flawed.

[235]Smith (1994a), 48, discussed to p.53.

underdeterminate, as the definition 'a fleshy, red, sweet fruit found on trees' undetermines whatever ('apple', 'cherry', 'plum', etc.) is the term to be defined. There just do not seem to be enough platitudes, and informative enough ones, to provide a definition from them. If Smith is right, and this is the case, this problem together with problem #2 seems to create a dilemma for the explicit, reductive route. The more specific and numerous the platitudes are in order to combat this problem, the more controversial they become and therefore dubious as platitudes. The less of a problem #4 becomes, the more of a problem #2 is likely to be, and vice versa.

5. Lastly, any theory of the implicit, nonreductive type may need to deal with a specific problem of its own: that of explanatory insufficiency. If the definition of *x* is constructed by summarising platitudes that themselves contain the term *x*, one may not be sufficiently explaining what it is to be *x*. The definition has succeeded in placing the term to be defined in a context among other terms, but by doing so may have done little to explain what that term really means. In some cases this is acceptable, for instance when there is a more or less obvious and noncontroversial phenomenological or experiential basis underlying whatever the term represents. Colour-terms, for example, might be defined by a nonreductive analysis such that 'red' means 'that which causes users of such a term to experience the visual sensation of redness'. 'Red' is used in the definition, and there is therefore a lack of a full explanation of what redness really is. This is perhaps acceptable in analyses of colours, however, because there is good reason to believe (based on empirical considerations of the undergirding physics of colours and the biology of sight, as well as the lack of controversy with regard to the nature of colours), that there is an underlying experiential or phenomenological basis for redness which need not be explained. With regard to morality, however, one does meet with controversy at even the most basic level (as these analytical philosophers

would call it, the 'platitudinous' level). Moreover, no one appeals to a noncontroversial undergirding physicality of all our moral judgments. The result of this is that there is not a general consensus as to what morality is like in the same way as there is with colours. In the words of some philosophers, we lack a 'robust phenomenology' and 'a dispositional grounding' for morality like we have for colours,[236] and so a naturalistic definition must *explain* morality, rather than leave to be assumed what it is all about. When one allows the term to be analysed to be retained in the platitudes that are summarised in order to provide the definition, it seems that this requirement for explanation is being neglected.[237]

Whether or not these five problems with the analytical approach of platitude systematisation can in any way be circumvented, they are at least very problematic. Not surprisingly, given this situation, another response to the problems that have beset semantic naturalists has become popular.

c. *Response: abandonment of Semantic Justification*

If, as the foregoing discussion suggests, the type of analytical method opted for by Lewis and Jackson, and somewhat differently by Smith, is still open to the objections which have plagued prior attempts at providing a semantically naturalistic theory of ethics, and is beset with further problems germane to the application of the particular method, then one may understand why this 'old line naturalism', in the words of one contemporary naturalist, 'has largely disappeared'.[238] Another admits that it seems impossible to settle the difficult issues surrounding such ideas as moral realism and the possibility of settling moral disagreement 'in any *a priori* way'.[239] With regard to meta-ethics in general, many are now of the

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[236]Darwall, Gibbard and Railton (1992), 162-3.
[237]For more discussion on this subject see Boghossian and Velleman (1989), esp. 89-90; and Darwall, Gibbard and Railton (1992), 152-64.
[238]Brandt (1996), 200.
[239]Sturgeon (1988), 230. He argues more thoroughly for this position in (1982).

conviction that 'Recent philosophy has *misrepresented* these questions by discussing them in terms of questions about the definitions of words.'[240] Despite the attempts of some philosophers to keep this semantic approach to morality alive, most philosophers-- even naturalists-- wish to hasten its demise. Richard Boyd, for example, specifically argues against analytical semantics with respect to moral terms.[241] Some papers were confident enough in the early part of this decade already to discuss semantic naturalism in the past tense.[242] Peter Railton, another naturalist, describes in this passage one of the motivations for this abandonment of the Semantic Justification:

> '...philosophers increasingly are clear that questions about meaning are intimately bound up with questions of metaphysics, epistemology, mind, empirical science, and even rationality and evaluation. Rather than saying that contemporary philosophy sees all of these deep questions from the flattening perspective of language, it would be more accurate to say that contemporary philosophy is suffused with an awareness that any intelligible answer to these profound questions must reflect the potentialities and limitations of language and thought.'[243]

The question that naturally arises here is this: If logical naturalism is viewed as having failed because of its simplistic hope that moral conclusions might be validly derived from nonmoral premises without so much as a justification or explanatory definition, and if semantic naturalism is in widespread disfavour for several reasons, among which is the inability of competent users of a language to agree upon the meanings of moral terms and incorporate all aspects of moral practice in their definitions, then what is the alternative? As will be shown, the naturalists who have abandoned or

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[240]B. Williams (1985), 121. (emphasis added).
[241]Boyd (1988), 194-195, 199.
[242]e.g. Horgan and Timmons (1991) discuss semantic naturalism (which they call 'analytic ethical naturalism') under the heading 'Remembrance of Things Past' (p.449).
[243]Railton (1996), 51.

avoided the analytic means of justifying their naturalistic view of moral principles, properties and terms, have opted for a *synthetic* means instead.

5. AN ESCAPE ROUTE FOR NATURALISM: APPEAL TO THE SYNTHETIC

Rather than attempt to overturn all of the mounting criticisms of semantic naturalism that are relevant to one's specific theory, as well as any criticisms of the analytical approach to semantics in general, a philosopher who is convinced that moral principles, properties and terms are accessible to science may choose instead to abandon the Semantic Justification for this position. Just as a logical naturalist could evade the strict force of Hume's Law by attempting to justify one's naturalism on the basis of the meanings of words rather than proposing an exception to the 'conservation of logic', a disillusioned semantic naturalist might attempt to evade the criticisms of Moore, Hare, Blackburn and others by justifying one's naturalism on some synthetic ground; namely, the *a posteriori* conclusions of science. For example, Richard Boyd has argued for synthetic naturalism by defending the possibility that one 'may choose to agree that goodness is probably a physical property but deny that it has any analytic definition whatsoever'.[244] Perhaps an analysis of language will not support naturalism; but an analysis of language is not the only tool a naturalist can use for such support. Science provides information which many naturalists claim is very relevant to morality, even to the extent of justifying a view of moral judgment and discourse as comprehensible using only principles, properties and terms that are acceptable for use in scientific enquiry.

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[244]Boyd (1988), 199.

To illustrate this shift of the burden of proof from the semantic level to the synthetic, such a move may be phrased as a response to the arguments of Moore, Hare, and Blackburn respectively.

a. *Beyond Moore*

In the presence of any semantic formulation of Moore's Open Question Argument, including those which reside within the parameters which have been set forth in the last subsection, a naturalist may state that he is not making a semantic claim, and thereby evade the argument. The critic argues in the following form: 'By the analysis of the meanings of moral words in ordinary language, it is an open question whether *x*, which is advocated by a naturalist theory, is good.' To this argument the naturalist can respond: 'I agree, but my theory does not operate by an analysis of the meanings of moral words in ordinary language.' It may be an open question whether *x* is good when one's ultimate appeal is to the semantics of ordinary language; but when one allows science to modify or correct aspects of that basis, this open question might become closed.

Even when the Open Question Argument, as it has been presented so far, is buttressed by an explanation, the naturalist encounters no difficulty in evading its force if an appeal is made to synthetic truths gained through scientific enquiry. Each of the following features has been said by one or another of the critics of semantic naturalism cited here to be inherent in the semantics of morality, i.e. to have *a priori* status as a feature of our ordinary language when we use moral terms:

1. The possibility of people disagreeing on moral issues
2. An objective or impersonal standard for moral judgment
3. The possibility of people being wrong in their moral judgments

4. The possibility of distinguishing between just and unjust use of power

5. Moral claims being either true or false

6. Categoricalness-- the impossibility of opting out of moral decisions

7. An attitudinal or action-guiding element to judgments

To any of these, or any other aspect *a* of moral language which is said to be inherent in the very moral terms we utilise, a naturalist can respond in the following fashion:

> Whether or not *a* is inherent in the concepts used in ordinary language when moral issues are raised is not the last word in my ethical theory. Whether *a* is so inherent in ordinary moral language or not, I am not prepared to take *a* to be a necessary part of 'morality' as I define it. I find good reason, based on scientific enquiry, to define moral terms in a way which does not admit of *a*.

Further, the naturalist may provide an explanation of why we have come to erroneously speak as though *a* were actually an indispensable part of making moral judgments. Alternatively, the naturalist may show how, even though *a* is not actually an aspect of morality, it often or even always accompanies the operation of morality, for instance because of the nature of human psychology.

When the appeal to ordinary language for justification is withdrawn, the main argument of Moore, together with the many later adaptations of it, become red herrings. The real issue for such a naturalist is *not* whether one can close a meta-ethical question by the lights of the analytical approach to the semantics of ordinary language, for this very well may be impossible. In that case it could still be possible to establish a naturalist ethical theory which gains its justification from a synthetic source instead: particularly, facts about the world as are gained from scientific enquiry. In arguing

against naturalism, Moore said that 'propositions about the good are all of them synthetic and never analytic'.[245] Although it is not clear that anyone made this explicit before Moore, someone could accept this statement while remaining a naturalist. Moore does not confront this possibility because all of his opponents seemed to offer analytical definitions, or definitions based on the concepts inherent in ordinary language, for moral terms.

b. *Beyond Hare*

Each of Hare's three arguments can theoretically be surmounted by appealing to synthetic truths instead of the semantics of ordinary language. First is his charge that naturalism entails cultural relativism because it assumes that moral beliefs are a function of the language within which they figure, whereas ordinary moral language is not relativistic. Simply, the naturalist who abandons the Semantic Justification will no longer seek to root moral beliefs in language, and so whether or not morality is relativistic in ordinary language will not by itself be of the utmost importance. If the synthetic facts of the matter as science finds them justify relativism, or on the other hand if they do not, our ordinary language conception of the matter will itself be susceptible to judgement, rather than being the arbiter. Furthermore, if moral beliefs are no longer being seen as a function of the language in which they figure, there is no reason to think that they are necessarily relativistic anyway, by Hare's account; for it was precisely their adherence to ordinary language which led him to make the claim to cultural relativism in the first place.

Hare's second and third arguments rely on the notion that moral judgments are inherently prescriptive in nature. These criticisms of naturalism can be circumvented, if a naturalist proposes that whether or not ordinary moral language is prescriptive, ordinary language is not the last

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[245]Moore (1903), 7.

word on moral issues. To either account for or dispense with prescriptivity in morality is a challenging project for the naturalist, but it is one which, if moral language is not the uttermost basis for the ethical theory, can be accomplished in various ways. For one instance, prescriptions could be seen as incidental to the making of moral judgements, which are in themselves primarily descriptive. The naturalist could explain prescriptivity as a natural psychological phenomenon arising from the recognition of a certain kind of descriptive feature. A revision, or at least reinterpretation, of conventional moral language might therefore be justified on the basis of synthetic truths as concluded by science. Therefore, according to synthetic naturalism, if scientific facts are invoked to participate in justifying a claim about the nature of morality, such may properly be done despite restrictions placed on moral terms by their meanings in ordinary language.

c. *Beyond Blackburn*

Simon Blackburn's argument is that the supervenience of the moral on the natural is incompatible with the fact that moral property-terms never arise in a complete analysis of natural property-terms. One may overcome this objection to naturalism as well by appealing to the synthetic level. This has been done explicitly by James Klagge. It may be the case, Klagge says, that moral properties do indeed always accompany natural properties, but that by analysis, or 'the laws of logic and the meanings of words',[246] one may not be able to derive the moral from the natural. Blackburn assumed that the relation between moral and natural properties (supervenience) has to be a matter which is justified 'solely by appeal to the laws of logic and the meanings of moral terms';[247] in other words, he assumed that supervenience has to be *analytical*. Klagge raises the possibility that we

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[246]Klagge (1984), 374.
[247]ibid.

may represent the supervenience of the moral on the natural *synthetically*. Klagge's particular proposal for how we come to know such a synthetic truth may or may not be naturalistic,[248] but a naturalist can evade Blackburn's argument by Klagge's route as long as adoption of the synthetic truths necessary to establish supervenience is warranted by science.

D. Final Court of Appeal: Naturalism on the Synthetic Level

The final conclusion of the last chapter[249] was that synthetic naturalism could still be true if both logical and semantic naturalism were false. Therefore, any of the arguments leveled at either logical or semantic naturalism are to that extent ineffectual against the synthetic. This does not mean that such arguments might not be *reinterpreted* in order to affect the synthetic level; but rather, a refutation of semantic naturalism has thus far said nothing of the prospect for a workable synthetic naturalism. One goal of the present chapter has been to present the two most significant strategies for critique of naturalism, and by so doing highlight an area that is neglected by such strategies. The synthetic level of understanding the naturalist claim, as evidenced from the independence which exists between it and the semantic and logical levels, is indeed neglected by these two strategies of critique. Neither Hume's restriction on the derivation of 'ought' from 'is', nor the several variations on the 'naturalistic fallacy' (or, more precisely, the 'naturalistic error in analysis') speaks directly to synthetic claims about morality. The means of justifying such a claim is fundamentally different. Both logical and semantic naturalisms depended crucially on the *a priori*,

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[248]Klagge calls his brand of supervenience a *metaphysical* type of supervenience (p.377), and does not attempt to support it with scientific considerations.
[249]I.C.4.

whereas synthetic naturalism seeks to achieve the same results by an *a posteriori* means.

Another goal of this chapter was to describe what such a view might look like and outline possible problems with it. As synthetic naturalism is very much a going concern in philosophy, the field is very broad and recent work is abundant. What will be presented in this section is a brief description of the nature of the approach, an outline of some prominent ideas and players, and documentation to support the claim that these ideas and players have recently begun to receive significant attention by critics. When this is completed, the foundation will be laid for the next two chapters by a suggestion as to a potential programme of critique of synthetically naturalistic theories.

1. THE NATURE OF THE APPEAL

Proponents of Hume's Law have endeavoured to force logical naturalists to define in premises the moral terms of their conclusions. Nearly impossible stipulations for semantic naturalists have been set in place by G. E. Moore and later analytical philosophers, producing a situation exacerbated by arguments against dependence on the analytic/synthetic distinction and appeal to *a priori* truths. This state of affairs has forced semantic naturalists either to consider more closely the method of analysis or (more commonly) to abandon it altogether in favour of a more directly scientific approach to morality. This scientific approach may be represented by the Synthetic Justification: *The results of enquiry into facts or actual states of affairs are necessary and sufficient to explain the principles, properties and terms used in moral experience and moral discourse.* The phrase 'facts or actual states of affairs' has a specific meaning to a naturalist, who places a particular constraint on the types of facts that are admissable.

To the extent that one is a naturalist about ethics, the facts or states of affairs that are obtained as the raw materials for an ethical theory must be acceptable for use within scientific explanations.

In this light, the Synthetic Justification can be seen to place a heavier burden on science than either of the other two levels of naturalism do. Much of the explanation in semantic naturalism, for instance, comes from an analysis of the meanings of words in ordinary language. These meanings have an *a priori* basis, and as such they do not require scientific support. To those who appeal to the Synthetic Justification, many or all claims that had an *a priori* basis under the Semantic Justification are now admitted to be in need of an *a posteriori* one.[250] Since, for a naturalist, all *a posteriori* claims must be accessible to science,[251] such an admission places much of an ethical theory's burden of proof on science.

Analytical philosophy may have had a great deal to say about the prospects and problems of logical and semantic naturalism, because the Logical and Semantic Justifications are fundamentally *analytical* justifications. They appeal to *a priori* considerations of logic and the meanings of words. Considering the nature of synthetic naturalism, it seems likely that this critical role will not be played by the same area of philosophy. The synthetic naturalist operates by taking tasks which for the analytical philosopher are the domain of semantics of ordinary language, and transferring them to the domain of science and philosophy of science. It follows from this that philosophy must significantly familiarise itself with *science* in order to properly play the critical role in assessing naturalism that it did in the case of the analytical levels of naturalism. For instance, the

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[250]There is a possibility that one might choose to defend a naturalistic theory which has a hybrid epistemology, where morality depends on both *a priori* and *a posteriori* truths. In this case a theory will be prone to criticism as a semantic theory insofar as it claims are semantic (*a priori*), and as a synthetic theory insofar as its claims are synthetic (*a posteriori*). Again, synthetic *a priori* truths cannot be invoked by naturalists as defined here.

[251]See I.A.

nineteenth century philosopher Herbert Spencer developed a naturalistic ethical theory inspired by the new mechanism for evolutionary change proposed by Charles Darwin.[252] Since Spencer framed his argument in terms of the meanings of words, G. E. Moore, in arguing against his view, needed to know little or nothing about Darwin's theory of natural selection. Moore could appropriately criticise Spencer using the newly blossoming philosophy of language. He did not need to investigate any alleged scientific underpinning of Spencer's ethic in order to find a fatal problem with it, and so he did not investigate it.[253] In the context of *synthetic* naturalism, however, things are different. If Spencer's theory were restated so as to be a *synthetic* rather than an *analytical* claim-- a matter of fact rather than a matter of the meanings of words in ordinary language-- Moore's criticisms would be ineffectual. James Rachels explains this possibility:

> 'Spencer had phrased his thesis as a thesis about words: he said, "The conduct to which we apply the *name* good, is the relatively more evolved conduct; and bad is the *name* we apply to conduct which is relatively less evolved." It is possible, however, to construe Spencer's view differently, as a claim about *what is in fact* good conduct. On this alternative reading, Spencer was offering a criterion, not a definition, of good conduct. If so, the open question argument would not work against it... Spencer left himself open to Moore's criticism because he did not distinguish definitions from criteria-- it is a distinction that apparently he did not notice.'[254]

This new reading of Spencer would put an extra burden both on the theorist and on the critic. The theorist would have to provide scientifically acceptable evidence that being highly evolved is worth being considered as a criterion for goodness. The critic, in turn, would have to find fault with any supposed evidence, or with the link between the evidence and the ethical point. Therefore, in addition to philosophical considerations which continue

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[252]Spencer (1879); (1892). Darwin's theory was introduced in (1859).
[253]His critique of Spencer is Moore (1903), 46-58.
[254]Rachels (1990), 69-70.

to remain important, the synthetic naturalist's extra burden is a thorough scientific justification of factual claims, and the critic's extra burden is a thorough knowledge of the science involved. In short, the decline of analytical forms of naturalism has brought with it a practical necessity that moral philosophers interested in proposing or examining such views be well acquainted with science.

2. THE POPULARITY OF THE APPEAL

It is possible that moral philosophers could, upon being presented with the several problems that confront a semantic construction of the naturalist claim, reject naturalism in ethics altogether. However, the literature indicates the presence of a strong trend towards the continued endorsement of the naturalist claim, but in the context of the Synthetic Justification. The literature can be categorised in various ways. In this thesis distinctions have already been mentioned regarding cognitivism vs. noncognitivism, descriptivism vs. nondescriptivism, realism vs. antirealism, theories of belief vs. theories of sentiment, and reductive theories vs. nonreductive theories. The parties on either side of each distinction can claim that proposed features of moral discourse and practice are of a kind that can be countenanced by science; and insofar as they do this, they are naturalists. Likewise, it is possible for a naturalist of any of these persuasions to opt for a thoroughly synthetic, *a posteriori* approach to ethical theorising. Other distinctions among ethical theories may also be described which do not exclude the synthetic naturalist from either camp. For example, there is a distinction between those who believe that 'moral judgments are factual in the paradigm sense afforded by empirical or theoretical judgments in the natural sciences', and those who believe that this attempt to make scientific judgment a model for ethical judgment is

misplaced. This distinction has been described as the trend towards *continuity* of ethics with science versus the trend towards *discontinuity*.[255] Synthetic naturalists can exist on both sides of this divide. Some can believe that a naturalistic enquiry into morality justifies science-like conclusions in ethics, whilst others believe that such an enquiry yields more convincing evidence *against* the similarity of ethical conclusions to scientific conclusions. A related but more general statement is that synthetic naturalism in itself does not presuppose any particular position on the matter of how one 'knows' in the context of morality. Synthetic naturalists can hold a variety of positions regarding moral epistemology.[256] All of these divisions cut across naturalism, and the synthetic level of understanding it in particular.

There is much evidence for the popularity of various synthetic approaches to naturalism. One type of approach could be broadly classified non-cognitivist, and is endorsed naturalistically in different ways by Simon Blackburn, Allan Gibbard, and Gilbert Harman.[257] For instance, Blackburn claims that his theory 'intends to ask no more from the world than what we know is there... It asks no more than this: a natural world, and patterns of reaction to it'.[258] Furthermore, 'In the case of moralizing, nothing stands in the way of a complete naturalistic story of what it is, why we do it, and, quasi-realistically, why we are right to do it.'[259] As was shown in the last section, Blackburn often argues from the standpoint of the meanings of words in ordinary language; however, he also avails himself of synthetic means of defending his naturalistic ethic, with a scientifically acceptable

[255]Darwall, Gibbard and Railton (1992), 126-130.
[256]Discussions of these epistemological approaches in relation to morality can be found in Sinnott-Armstrong and Timmons, ed. (1996), which also contains a bibliography of recent material (Haney (1996)).
[257]Blackburn (1984), 164-5, 181-6; Gibbard (1990), 107

picture as to what the world is like. His approach is to argue against semantic naturalism with semantic arguments, but then to articulate his own position by means of a largely synthetic argument, based upon an *a posteriori* understanding of the naturalistically explicable reactions of human beings to the naturalistically explicable world.[260]

A more traditional naturalist approach is the neo-Aristotelian one, where a scientific enquiry into the psychological (and in some cases sociological) functioning of humans are found to reveal foundations for ethics. Philippa Foot is the exemplar of this route. Others such as G. E. M. Anscombe, Peter Geach and Mary Midgley have contributed as well, the latter most recently. Although their commitment to naturalism as defined here may be questioned (and certainly it is only the *secular* writings of Anscombe and Geach that can be considered naturalistic at all[261]), they do sometimes claim their ethical theories to arise from empirical or scientific enquiry.[262]

Another route is the straightforward reductivism which sees morality as redefinable or otherwise reducible to facts that fall squarely within the confines of science. Richard Brandt has been called 'a leading proponent of this position'.[263] Another prominent writer in this tradition is Peter Railton, whose belief is that 'We are natural and social creatures, and I know of nowhere else to look for ethics than in this rich conjunction of facts'.[264] So, he develops an ethic based on the view that 'moral facts are identical with-- or otherwise reducible to-- natural facts'.[265] Other writers abound who

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[260]Blackburn (1996) clarifies his position in this area.
[261]viz., Anscombe (1958); (1981); and Geach (1956).
[262]For Foot's view see Foot (1978a); although Foot (1994), (1995), and Hursthouse, Lawrence and Quinn, ed. (1995) show how her thought has evolved. For Midgley's theory see ch.I.B.3b, and the references cited there.
[263]Haney (1996), 330. See Brandt (1979) and (1996) for his view.
[264]Railton (1986), 207.
[265]Railton (1993a), 280.

attempt to find an appropriate reduction of moral facts to scientific (usually psychological or sociological) facts.[266]

None of these trends are what recent critics have been calling 'Ethical Naturalism Revived',[267] however. The most significant recovery from 'blows that decked' analytical forms of naturalism is a nonreductivist moral realism which has 're-entered the philosophical ring in powerful-looking naturalistic form' and 'has come to dominate recent work in metaethics'.[268] These philosophers, the most notable of whom are Richard Boyd, David Brink and Nicholas Sturgeon, have attempted to provide an ethic which does not involve reductivism; instead they propose another type of connection of moral facts to natural facts. In Brink's words,

> 'moral properties are functional properties... moral properties are those which bear upon the maintenance and flourishing of human organisms... The physical states which contribute to or interfere with these needs, wants, and capacities are the physical states upon which, on this functionalistic theory, moral properties ultimately supervene'.[269]

On this view moral properties are functions of physical properties in an analogous way to one view of the relationship between mental properties and physical properties in the philosophy of mind.[270] Richard Boyd elaborates the contributions of recent findings in philosophy of science to this kind of position,[271] and Nicholas Sturgeon emphasises the difference between this nonreductivist view and reductivist views of both semantic and synthetic varieties.[272] Other writers have produced variations on this theme

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[266]E.g. Churchland (1979); Kohlberg (1981); Flanagan (1991); Rottschaefer (1991); Shibles (1992); and A. Clark (1995).
[267]Horgan and Timmons (1991), 453.
[268]ibid., 447.
[269]Brink (1984), 121-2. See also (1989), 177-80.
[270]See, e.g. Putnam (1967); (1967a); and especially Davidson (1970).
[271]Boyd (1988). These and other contributions are concisely summarised and updated (the bulk of Boyd's paper was written in 1982) in Horgan and Timmons (1991). Boyd's paper is arranged in such a way as to exhibit synthetic naturalism's success at meeting objections to analytical naturalism.
[272]Sturgeon (1982); (1988).

as well.[273] With such an array of moral philosophers currently proposing theories which rely on the Synthetic Justification for naturalism, there is certainly sufficient evidence that what Philip Kitcher said of epistemology is true of ethics as well: 'The Naturalists Return'.[274]

3. CRITIQUE OF THE APPEAL

Along with synthetic naturalist theories has come trenchant critique. Several philosophers have noticed the fact that, even though a synthetic naturalist claims to be to some extent bypassing ordinary language, the Open Question Argument can be restated in such a way as to raise doubts about even these theories. Numerous papers have been written recently in the attempt to reformulate the Open Question Argument in this way.[275] Some of these are linked with *a priori* considerations of morality to various extents; to the extent such an argument is so linked, the synthetic naturalist may possibly have leverage against them.[276] However, on the level of the individual moral agent, the further a synthetic naturalist description of morality veers from the morality that agent actually experiences (in a broad sense), the less reason that agent has for accepting the view as a *moral* view rather than some invented '*shmoral*' view. For example, if someone proposed that morality should be so grossly revised that there would be no action-guiding element, no truth-aptness, no objectivity, and no possibility for moral disagreement, the natural question to be raised is 'What makes you think that what you are describing is morality?'.[277] A synthetic picture of

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[273]E.g. Miller (1985); Lycan (1986); Post (1987); Copp (1990); (1991); (1995).
[274]Kitcher (1992), title.
[275]E.g. S. Ball (1988); (1991); Horgan and Timmons (1991), 461f; (1992); Smith (1994a), 29-35; Rosati (1995); Darwall, Gibbard and Railton (1992), 177-8; Wiggins (1993a).
[276]'Leverage' meaning that the synthetic naturalist might be able to claim that the alleged *a priori* truth about morality should be revised in light of scientific evidence. This is the essence of what some (e.g. Brandt (1979), ch.1) call 'reforming definitions'.
[277]This argument is developed further in ch. IV.

morality may not have to adhere closely to ordinary language, but it has to be distinguished as morality *somehow*. Michael Smith depends heavily on this requirement when he criticises synthetic naturalists for their disregard for the 'platitudes' of morality.[278] His general point is that when one attempts to provide an ethical theory using solely the findings of science apart from *a priori* considerations, there is no guarantee (in fact, it seems unlikely) that the result is going to look very much like what many consider morality to be all about. His reason for this is that an *a posteriori* approach to morality is blind to elements of moral discourse and practice which are *thought* rather than *empirically discovered*. Several other philosophers also critique synthetic naturalist theories with the general approach of finding fault with the abandonment of certain features without which morality loses its distinctiveness.[279] Smith makes a more specific point as well. He defends the possibility that Hare's first argument against semantic naturalism described earlier[280] can be altered so that it will affect synthetic, or what Smith calls 'metaphysical-but-not-definitional', naturalism.[281]

Stephen Ball, Terence Horgan and Mark Timmons utilise a slightly different approach to criticising synthetic naturalism, and do not speak of the *a priori*. Like Smith, however, they still operate by pointing out elements of what might broadly be termed 'moral experience'[282] that are neglected or insufficiently considered by synthetic naturalist theories. They speak in terms of 'prephilosophical intuitions' and experience of 'hermeneutic pressure' to see morality in a certain way.[283] Horgan and Timmons's argument is based on a thought experiment invented by Hilary Putnam,

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[278]Smith (1994a), 29-35.
[279]E.g. Holmgren (1990); Rosati (1995); Sencerz (1995).
[280]Section C.3c.
[281]Smith (1994a), 33-35.
[282]If this term is used, it must be seen in a broad (not strictly empirical) sense, such that it includes anything on the indvidual level (sense experience, thought processes, states of mind) that is considered fundamental to morality.
[283]S. Ball (1988); (1991); Timmons (1990); Horgan and Timmons (1991); (1992a); and esp. (1992), which is written specifically in terms of the Open Question Argument.

where a planet just like Earth in every respect save the moral is imagined in order to tease out features of the nature of morality that might not be obvious in everyday experience. They utilise this argument primarily against the new nonreductivist naturalisms of Boyd, Brink, Sturgeon and others.

David Wiggins is another critic of synthetic naturalism, who explains how the Open Question Argument reveals a difficulty for any naturalist who claims that a certain value *V* is identical with certain natural property. He finds reason to 'doubt whether anything in moral philosophy had better depend on such an identity's obtaining'.[284] Wiggins shows that in order for such a naturalist to accomplish this identity, it is not sufficient to show 'item *x* to have value *V*'. Rather, the naturalist must also show three things which according to Wiggins are much more difficult, if not impossible. The first is that within the naturalistic understanding of *x*, *V* must be shown to necessarily be present. In other words, a naturalist must succeed in '*finding V* in *x*'. Second, one must not merely show that people do react in such-and-such a way 'to item *x qua* possessed of *V*', but one must answer the question of 'whether one is oneself to concur in this reaction'. Third, 'if a value has *qua* moral or aesthetic to have some connection with feeling (the particular feeling depending on the particular value), then, in the cases where feeling connects with the will, finding the value in *x* must have some however indirect connection with the will'.[285] These three stipulations pose significant obstacles for a naturalist theory that proposes an identity between moral and natural properties.

Other criticisms focus on other aspects of synthetic naturalism besides the general difficulties they face in providing a description of morality that is at once naturalistic and complete. One focus of such

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[284]Wiggins (1993a), 334. See also (1993).
[285]Wiggins (1993a), 331.

criticism is on the kinds of analogies which are used to defend the plausibility of both nonreductivist and reductivist theories. Synthetic naturalists often utilise analogies, either to support supervenience relations (in nonreductive theories) or property identities (in reductive theories). Both types of analogy have been tested and found wanting by several critics.[286] The supervenience issue is possibly the most significant source of criticism if the amount of literature is a reliable indicator. The major argument leveled in this area is the old argument that a supervenience relation in this area cannot but be 'an opaque, isolated, logical fact, for which no explanation can be profferred'.[287] This argument, later dubbed an 'Argument from Queerness' by John Mackie, is still current and widely recognised as problematic for nonreductive naturalists.[288] There is prolific critical notice of the more prominent of the particular theories as well, such as that of David Brink (in addition to Horgan and Timmons's critiques cited above).[289] Simon Blackburn has criticised Nicholas Sturgeon's account of moral explanations,[290] and there has been a fruitful exchange published between David Wiggins and Peter Railton on the subject of the latter's naturalism.[291]

With respect to the non-cognitivist forms, a summary of the situation has stated that 'new problems beset old noncognitivisms, and so noncognitivism has had to develop or die'.[292] At least three problems face non-cognitivist naturalists. First, non-cognitivism as a position is obsolete on many philosophers' views, since it is essentially a negative position and

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[286]e.g. Hare (1984); Schiffer, S. (1987), 153-4; Blackburn (1985a); (1993); Horgan and Timmons (1991); (1992a); Horgan (1993); and Gampel (1996).
[287]Blackburn (1971), 111.
[288]Mackie (1977), 39-41. Garner (1990) and Horgan and Timmons (1992a) are adaptation of Mackie's argument in the context of synthetic naturalist theories.
[289]e.g. Garner (1990); Copp (1991); and Yasenchuk (1995).
[290]Blackburn (1991).
[291]In order, these are Railton (1993a); Wiggins (1993); Railton (1993); and Wiggins (1993a).
[292]Darwall, Gibbard and Railton (1992), 145.

the positive positions it once fiercely railed against have largely either disappeared or changed. There are so many types of cognitivism current, including ones with only a minimal claim to moral truth, that many have questioned whether non-cognitivists can both argue against all of their claims and keep their own positions distinctive.[293] Second, there is continued pressure for non-cognitivists to recognise some level of truth-aptness in moral judgments. Crispin Wright's idea of minimalism with regard to moral truth, for example, has in his estimation dispensed with the problems that non-cognitivists have seen in cognitivism, whilst avoiding the pitfalls germane to non-cognitivist views.[294] A flourish of literature has grown out of consideration of this issue.[295] Third, non-cognitivists have historically been staunchly in the analytical tradition, and there is doubt as to whether they can successfully reinterpret their perspective so as not to make the analytic-synthetic distinction do too much work.[296] As for criticism of specific theories, Walter Sinnott-Armstrong has discussed problems with Allan Gibbard's theory, Bob Hale has done the same with that of Simon Blackburn, and Nicholas Sturgeon with both of these as well as that of Gilbert Harman.[297]

Neo-Aristotelian moral philosophy has been criticised for not having developed much since its inception over thirty years ago. According to a brief survey of naturalism by C. R. Pigden, 'the writings of Geach, Midgley and their allies are "suggestive" but nothing more'.[298] Perhaps the reason for this is that it is too difficult to resurrect a significant Aristotelian sense of human purpose or function within a modern scientifically naturalistic

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[293] ibid., 184-5. Railton examines this issue in (1993a).
[294] C. Wright (1988).
[295] See Brink (1986), 36; Divers and Miller (1994); Jackson, Oppy and Smith (1994); Smith (1994a); (1994b); (1995), 278-282; C. Wright (1992); (1995), esp. 209-216; and Hooker, ed. (1996).
[296] Darwall, Gibbard and Railton (1992), 145.
[297] Sinnott-Armstrong (1993); Hale (1986); Sturgeon (1985); (1986); (1991).
[298] Pigden (1991), 430.

worldview. Elsewhere Pigden concludes after a more thorough treatment that the 'neo-Aristotelian programme... has conspicuously failed to deliver. Its adherents have either lapsed into theology (Geach), provided nothing concrete (Midgley), or left us with promissory notes (Anscombe and Foot).'[299] Whether or not Pigden's examination represents the whole truth of the matter, it seems that the crucial issue for neo-Aristotelian naturalists is the question of whether increased clarity and more specific defence of such a view will only be possible by abandoning the the naturalist claim as it is represented in this thesis. In fact, this is an issue for all synthetic naturalists. The critique summarised in this section shows that an important question to be explored is whether the goal of providing a complete description and explanation of morality can be achieved without inadequately representing morality on the one hand, or else breaching the boundaries of naturalism on the other.

E. Towards an Examination of a Particular Synthetic Naturalist Theory

One of the significant lessons which has been learned since the days when the 'naturalistic fallacy' was seen to be a once-for-all refutation of naturalism[300] is that each naturalistic theory must be examined for its own sake. No inductive leap is warranted from the refutation of cruder naturalisms such as the identification of 'good' with 'pleasure', for instance, to a claim about one that identifies 'good' with 'human well-being' with all that notion can possibly import from human psychology. There is even less

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[299]Pigden (1990), 152. Other discussion of its problems are Darwall, Gibbard and Railton (1992), 166-69; and Williams (1985), ch.3, and pp.152ff.

[300]According to Darwall, Gibbard and Railton (116-120), this was roughly the early to middle portion of this century, the 'heyday of analytic metaethics'.

potential for a leap on the synthetic level, since whereas semantic truths are often expected to be readily forthcoming in an analysis of ordinary language, the possibility for the discovery of radically novel, even paradigm-altering, scientific facts is well-precedented. If one allows for language that suggests that science is in some sense progressive, modern physics might be said to have 'outgrown' some assumptions of the Newtonian paradigm, and modern cognitive psychology arguably to have 'outgrown' some of the assumptions of both the psychoanalytical and behaviourist traditions. Likewise, since synthetic ethical naturalism claims to proceed with aid from scientific enquiry, one must leave open the possibility that moral philosophy will similarly outgrow past or present 'cruder' states in the light of new scientific findings. Given this possibility, an examination of naturalism is not likely, especially at the synthetic level, to provide sufficient critical examination of synthetic naturalism unless it encounters particular theories directly.

This is not to say that general applications are impossible. Certain background assumptions are likely to arise in several theories, and if these have been problematic in the context of one theory there is good reason to believe that they will be problematic in others. Certain threads of argument (like fallacious moves from 'is' to 'ought' and dubious analytical definitions of moral terms in non-moral terms) can be examined in their own right and the results applied as tools to a range of theories. In fact, it is presumably a major point of any examination of a theory to find a general application, such that the entire process may be employed in the future with much less effort and similar success. The point, however, is that the range of the application must be precisely specified and the generalisation itself supported with argumentation. In contrast, an unacceptable method would be to take an argument's success against one theory in a certain category as a licence to claim that any theory in that category is refuted.

1. CONTEMPORARY META-ETHICS AND CONTEMPORARY EVOLUTIONARY BIOLOGY

Any synthetically naturalistic theory of ethics could be chosen for consideration in order to provide a contribution to contemporary meta-ethics. However, a second purpose could also be served if a particular theory were chosen which represented an area that has received recent emphasis in contemporary science, and whose proponents claim a relevance to ethics, but has not received similar emphasis in mainstream meta-ethics. This second purpose would be the establishment of closer ties between a meta-ethical view which purports to be eminently scientific, and science itself. Synthetic naturalism represents a reversal of direction of earlier twentieth-century claims such as:

> '4.111 Philosophy is not one of the natural sciences.
> 4.112 Philosophy aims at the logical clarification of thoughts...
> 4.1121 Psychology is no more closely related to philosophy than any other natural science...
> 4.1122 Darwin's theory has no more to do with philosophy than any other hypothesis in natural science'.[301]

Every synthetically naturalistic theory, on the other hand, by definition depends on the conclusions of science for its factual support. One might expect science, then, to have been intimately connected with the conclusions of the synthetic naturalists who were mentioned in the last section. Virtually all do make reference to human psychology, and many take human social behavior and social trends into consideration. Some kind of psychology and sociology, then, are fundamental to many contemporary theories of ethics. But, as Darwall, Gibbard and Railton's review article of current moral

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[301] Wittgenstein (1921).

philosophy notes as a final conclusion, there is, generally speaking, a lack of truly empirically informed work even in these areas, and in particular on the 'nature or history or function of morality'.

> 'Too many moral philosophers and commentators on moral philosophy-- we do not exempt ourselves-- have been content to invent their psychology or anthropology from scratch and do their history on the strength of selective reading of texts rather than more comprehensive research into contexts... any real revolution in ethics stemming from the infusion of a more empirically informed understanding of psychology, anthropology, or history must hurry if it is to arrive in time to be part of *fin de siécle* ethics.'[302]

The possibility that synthetic naturalists are not in sufficient communication with developments in the sciences is perhaps very surprising, considering the fact that such writers claim the support of science for their ethical theories. Moreover, even a casual reading of the more scientifically relevant of recent work in ethical naturalism seems to support the conclusion of that review. Centuries after David Hume, what has been called '*The* Moral Problem' in today's meta-ethics is the prospect of reconciling his theory of human psychology with our view of morality.[303] Much has been accomplished in science with relevance to human psychology since Hume, which may have philosophical, including ethical, relevance.[304] One field in particular has experienced relatively recent developments which are thought by many to have important bearing on human psychology as regards morality: evolutionary biology.

Earlier it was said that G. E. Moore criticised the evolutionary ethic of Herbert Spencer solely for its linguistic rather than scientific content.[305] With respect to the consideration of science he exhibits in his published

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[302]Darwall, Gibbard and Railton (1992), 188-9.
[303]Smith (1994a); emphasis added.
[304]An example of a cognitive psychologist today who touches on what he sees as philosophical implications of his work is Daniel Dennett (1991).
[305]Section D.1.

writings, Moore has by some been criticised as 'passionately parochial and blinkered.' Antony Flew expounds upon this accusation:

> 'In that most curious volume, *Principia Ethica*, for instance, the whole discussion both of ethics and of meta-ethics proceeds as if outside time and space... Moore might as well have been writing not merely before Darwin but before Newton'.[306]

If the naturalist references cited in the last two chapters are a sufficient reflection of the mainstream of naturalistic meta-ethics, then one may at least tentatively propose that little has changed since Moore's day in this regard. Darwall, Gibbard and Railton may be correct in their indictment of the empirically ill-informed nature of much of contemporary meta-ethics. Evolutionist Julian Huxley, grandson of Darwin's chief defender T. H. Huxley, writes:

> 'It makes a great difference whether we think of the history of mankind as wholly apart from the rest of life, or as a continuation of the general evolutionary process, though with special characteristics of its own'.[307]

A reasonable question to ask is whether the significance of viewing man in an evolutionary context is so great as to be able to provide a naturalistic understanding of morality. Although there is a recent empirically-informed renewal of attempts to accomplish just this, the most prominent naturalistic meta-ethical writers do not consider the prospect very seriously. By far most of the naturalistic meta-ethical literature contains either insignificant or no reference to evolutionary theory.[308] To the extent that this is the case, and if the recent implications for the human sciences that have been drawn from evolutionary biology do have credibility, then any discussion of human moral psychology which neglects this information may soon be seen in

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[306]Flew (1984), 131.
[307]J. Huxley (1953), vii.
[308]E.g. Darwall, Gibbard and Railton (1992); Smith, ed. (1995); and the dozens of references within these two overviews, most of which have been cited in this chapter.

scientific circles as an obsolete vestige of the pre-Darwinian anthropological paradigm.[309]

The low level of communication between evolutionary theory and naturalistic meta-ethics goes both ways, however. Work on ethical matters within the evolutionary literature contains numerous references to the 'naturalistic fallacy' without much consideration of what that claim really means or in what contexts and to what extent it is applicable.[310] Also, many evolution-based ethics or evolutionary approaches to ethics are proposed with little concern for philosophical respectability. E. O. Wilson, for example, makes revolutionary meta-ethical claims, such as that a 'simple biological statement must be pursued to explain ethics and ethical philosophers... at all depths'.[311] However, the only ethical philosopher Wilson cites is John Rawls, who for his part had admitted to having no real position on traditional meta-ethical issues, and was of the opinion that other more practical questions should be dealt with in the meantime.[312] If evolutionary theorists who attempt to produce naturalistic ethical theories are to some extent unacquainted with recent discussions and developments in naturalistic meta-ethics proper, these attempts will most likely be of substandard rigour and cogency to the expectations of meta-ethically educated moral philosophers.

It is, of course, not a necessary thing that moral philosophy be either empirically ill-informed on the one hand or meta-ethically ill-informed on the other. Particularly with regard to *naturalistic* moral philosophy, which depends explicitly on support from science, such must be viewed as a situation to be avoided strenuously. To this end, the next chapter will

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[309] R. Wright (1995), Introduction.
[310] An example of this is the discussion of Robert Richards' evolutionary ethic in the journal *Biology and Philosophy*. See, for instance, Richards (1986); Hughes (1986); and P. Williams (1990).
[311] Wilson (1975), 3.
[312] Rawls (1971), 51-2.

consider a synthetically naturalistic theory which is claimed by its proponents to be supported by the facts of evolutionary biology. This will involve a thorough explanation and examination of both the science and the meta-ethics involved. In doing so, a way of assessing naturalistic moral theories will be proposed which takes into account both empirical and meta-ethical respectability. Thus communication will be promoted between scientists and moral philosophers, especially those of the latter who claim science as a source of support.

2. CONCLUSIONS

Naturalism as a meta-ethical idea has been criticised in so many forms and from so many perspectives in the twentieth century that oversimplification and confusion are perhaps inevitable. Naturalism has commonly been assumed to be cognitivist, to be semantic, to violate Hume's Law, to be reductive, and to be refuted by G. E. Moore. Discussions of naturalism often raise difficult issues such as the truth-aptness of moral judgments, the descriptivism/nondescriptivism debate, the role of the *a priori* in morality, the utility of reductionism, the relevance of reason and sentiment to morality, the usefulness of the analytic/synthetic distinction, the explainability of supervenience relations, the action-guiding element in morality, the possibility of synthetic identity without semantic equivalence, and the scope of scientific enquiry.

The main objective of the first two chapters has been to organise the concept of naturalism in such a way that the nature and scope of this century's criticism of it could be understood, highlighting any area which has not been the object of strenuous critique. The compartmentalisation of naturalism into logical, semantic and synthetic levels in the first chapter has facilitated this categorisation of the critique, because of the distinctiveness

of the justification to which each level appeals. Logical naturalism can be seen to appeal to a distinctive Logical Justification based on the logical validity of a certain type of progression; semantic naturalism appeals to a Semantic Justification based on the capability of defining certain words in certain ways; and synthetic naturalism appeals to a Synthetic Justification based on the obtaining of certain facts or states of affairs. With respect to critical discussion, as discussed in this second chapter, certain prominent arguments of this century have concentrated on the logical progression undergirding the Logical Justification. Another significant trend has focused on the feasibility of the type of definition that the Semantic Justification upholds. These critiques have been very thorough and popular, and have experienced several decades of continued clarification, explanation and testing. Obviously highlighted, then, and having only recently begun to be criticised, is the Synthetic Justification, which understandably contains most of the notable naturalistic meta-ethicists today. Even those few naturalists who have remained on the semantic level have paid much closer attention to their analytical technique, and have put forward their views with precision and caution rather than the vagueness and dogmatism which arguably characterised moral semantics before this century of sustained examination. The main surge forward, though, has come from the synthetic camp. Here moral philosophers, newly invigorated by recent developments in the philosophy of science and language, have sought to find the answers to longstanding ethical questions in the most solidly naturalistic of ways: through facts that are accessible to scientific enquiry.

Synthetic theories have been proposed of both reductivist and non-reductivist varieties, and critics have begun to examine them, present objections and request clarifications. Since these theories are so novel and variable, they must be examined on their own merits at this point rather than being discussed *en masse*, and so the next chapter is dedicated to the

examination of a particular theory as a case study in light of the work of the first two chapters. An additional benefit to be gained from such a case study is a facilitation of increased communication between those who are primarily moral philosophers and those who are primarily scientists.

Reviewers of twentieth-century meta-ethics Darwall, Gibbard and Railton had hoped that a 'more empirically informed understanding'[313] would surface in meta-ethics before the end of the twentieth century. Perhaps it is too late for this now, but if enough communication lines are soon established between moral philosophy and natural science, there may be enough time for the meta-ethics of the new millenium to begin on an improved footing in this respect. As philosophers develop a clearer notion of what science *does* and *does not* permit one to say, and conversely as scientists grow in philosophical sophistication, an answer might be approached to the question of whether naturalism on the synthetic level is the proper way to view morality, or whether a different approach is in order. The next two chapters will contribute to an exploration of this issue, first with regard to a particular theory, and then more generally.

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[313]Darwall, Gibbard and Railton (1992), 189.

Chapter III: EVOLUTIONARY NATURALISM IN ETHICS: AN APPROACH DESCRIBED AND CRITICISED

Paul Feyerabend recently claimed that in light of twentieth century philosophy of science, 'the problem is no longer how to articulate the monolith SCIENCE, but what to do with the scattered collection of efforts that has replaced it.'[1] Although many do not uphold the particulars of this philosopher's view of science,[2] few if any would disagree that, at least on the level of everyday practice, science does function as a 'collection of efforts' rather than a single discipline with a homogeneous methodology and subject matter. The naming and function of university departments, academic journals, and textbooks in the realm of 'the sciences' suggest that science more closely resembles a mosaic than a single brushstroke. Whether or not these subdisciplines could theoretically be united is an interesting issue, but a different one.[3] The present, and less controversial, point is that scientists in practice do speak in particular jargons, investigate specific objects, converse within roughly distinguishable communities, and call their disciplines by names which delineate their fields from others. If this is the case, then a meta-ethical theory which purports to be naturalistic, might depend on facts germane to any subset of these disciplines-- perhaps even to

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[1] Feyerabend (1995), 809.
[2] Papineau (1995), 810.
[3] Actually, it is at least two: the simpler question is whether or not all of the sciences contribute to a single consistent body of knowledge. To deny this is to espouse a sort of epistemological relativism (discussed in ibid.). The other question is whether the concepts used in one discipline are theoretically reducible to terms used in other disciplines. Some (e.g. Carnap (1934); and Crick (1966)) believe this to be possible, whereas others believe that any particular science 'employs concepts which are peculiar to it and indeed have little meaning' in the contexts of others (Medawar (1974), 61; see also Beckner (1974)).

only one discipline. For instance, there could be 'psychological meta-ethics' or 'sociological meta-ethics' (if sociology is counted as a science). Thomas Nagel, in his discussion of the idea that modern scientific disciplines can provide answers to philosophical issues, claims that physics and evolutionary biology are presently the most popular disciplines for this use.[4] Presumably none would dispute that evolutionary biology outstrips physics in the extent to which a science has been used to provide support for a naturalistic meta-ethic.[5]

This chapter is a description and critique of just one of the ways in which evolutionary biology has been the ethical naturalist's tool. This case-study approach is necessary because certain popular blanket arguments, based on the laws of logic and analysis of the meanings of words, leave a significant area of naturalism untouched-- that of *synthetic naturalism*.[6] Although similarly broad arguments are currently being developed in critique of synthetic naturalism as well, one of the significant features of this level of naturalism is that ethical principles, properties and terms are understandable with reference to the findings of science, which are not predictable[7] and continue to accrue through time. Therefore, it would seem premature for a critic to claim to sweep synthetic naturalism away with a single stroke, without dealing with relevant scientific theories. Once a particular naturalist theory has been examined, however, it is possible that certain errors may be discovered that could be common, even ubiquitous, among synthetically naturalistic theories. In this way, a case-study approach can contribute to a critique of synthetic naturalism phrased in broader terms.

The decision to examine evolutionary biology as a source of a naturalist meta-ethic is understandable, given its prominence (as Thomas

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[4]T. Nagel (1986), 9.
[5]For examples see the introduction to section C of this chapter.
[6]See ch.II.
[7]On this point see Medawar (1984), essay #2, entitled 'Can Scientific Discovery Be Premeditated?'.

Nagel indicated) in today's scientific writing on philosophical topics. It is also potentially helpful because it fulfils a need for the encouragement of scientific respectability in the work of naturalistic meta-ethicists, and conversely philosophical respectability in the work of those writing on the implications of evolutionary biology.

This examination of an evolutionary naturalist approach to meta-ethics will be preceded by a brief summary of the most relevant tenets of evolutionary biology, and a more substantial summary of the subdiscipline of that science which is claimed to provide the support for the naturalist approach-- sociobiology. This will provide the basis for a discussion of a currently influential view of the relationship between evolutionary biology and meta-ethics.

A. Evolutionary Biology: A Brief Overview of the Science

1. PHASE 1: EVOLUTION AS A BIOLOGICAL PROCESS

Since ancient times, writers in a vaguely scientific vein have postulated some sort of continuity among living things. Aristotle noticed with regard to living things that 'the system is not such that there is no relation between one thing and another'.[8] On the contrary, with respect to classifications of organisms 'because of the continuity, we fail to see to which side the boundary and the middle between them belongs'.[9] Not until the eighteenth century, however, did European scientists begin to consider seriously the idea that the continuity in life was a *temporal* phenomenon; and more specifically, that some living things could arise in time whilst

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[8] *Metaphysics* XII.x.3.
[9] *History of Animals* VII (VIII).1.588b.

others go extinct.[10] Kant endorsed this idea, which he called the 'cosmic spectacle of ever-lapsing change'.[11] Scientists began to question the view, previously assumed in the Plato-influenced world, that significant change was impossible in the history of life.[12] As one writer of the previous century had presaged, 'A Musician strikes not all strings at once; neither is it to be expected that everything in Nature at every time should act'.[13]

The French biologist Jean-Baptiste Lamarck, with his *Philosophie Zoologique*, together with an anonymous work called *The Vestiges of the Natural History of Creation* (later found to be written by Robert Chambers), brought scientific discussion of change in life through time-- evolution-- into the nineteenth century.[14] Especially through the work of Lamarck, the question of *how* evolution worked became a focal point for scientific discussion. An evolutionary theory would have to provide an answer to this question in order to be scientifically respectable. Lamarck's own answer to the question was that a creature can transform itself to some extent during its lifetime by its own actions, and these acquired changes automatically pass to its children. This view gained popularity for a time, but is now defunct.[15] The question as to how evolution worked, or the *mechanism* for evolution, was not answered satisfactorily until the late 1850's, when Charles Darwin and Alfred Russel Wallace independently came to the same conclusion.

2. PHASE 2: NATURAL SELECTION AS EVOLUTIONARY MECHANISM

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[10]Lovejoy (1936), 244.
[11]Kant (1755), 84.
[12]Lovejoy (1936), ch.10.
[13]Henry More (1659), II.ch.17.vii.
[14]Lamarck (1809); Chambers (1844).
[15]For a criticism of his view in light of current scientific understanding, see Cronin (1991), 30-42. This is not to say, of course, that knowledge and abilities cannot be passed from generation to generation; for this is certainly the case, especially in humans. See section B.1a.

Darwin had understood the central mechanism of evolution before Wallace made the same discovery, and Darwin's book, *The Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*,[16] explains the fundamental idea more fully than Wallace did. Part of the object of the book was to defend evolution itself, but as was shown in the last section, this was nothing new. Darwin's status as the father of modern evolutionary biology is rather due to his having discovered and supported a principle underlying evolutionary change: *natural selection.*[17] The principle follows from the following three premises:

1. More organisms are born than the environment can support (Principle of Limited Resources).
2. Organisms differ from each other in ways that are relevant to their chances of survival and reproduction (Principle of Variation).
3. The probability is good that characteristics of an organism will also be characteristics of its offspring (Principle of Inheritance).

To the extent that these premises are true, some characteristics of organisms will tend to increase in prevalence in a population over several generations, whereas other characteristics will tend to decrease in prevalence. The stipulations are that those characteristics be relevant to an organism's chances of survival and reproduction, that they be exhibited to differing extents in different organisms, and that they be heritable. To illustrate, let us suppose that the following are true:

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[16]Darwin (1859).

[17]In addition to Darwin's own explanation of this idea, which is still valid today, this concept can be found described in dozens of works in recent decades, such as S. Gould (1978), Prologue and ch.4; Flew (1984), ch.1; Maynard Smith (1988), part III; and Cronin (1991), ch.3.

1. The environment cannot support all of the robins that are born. (This exhibits the Principle of Limited Resources).

2. Robins vary in the number of eggs they lay. The fewer eggs are laid, the fewer there will be to survive to reproductive age. The more eggs are laid, the less care each chick will receive and so the less healthy each will be. (This exhibits the Principle of Variation).

3. The characteristic of laying a certain number of eggs is a trait which tends to be inherited by robins' offspring. (This exhibits the Principle of Inheritance).

All other things being equal, as the generations pass, robins who lay the right number of eggs succeed optimally in raising chicks. Since those chicks in turn tend to lay the right number of eggs as well, such robins should increase in commonality in the population. The characteristic of laying a certain number of eggs is therefore 'naturally selected' in robins.[18] The term 'selection' should not be seen as a positive choice, but rather as a result of a process of elimination or 'selection against' those individuals that have deleterious characteristics.

Natural selection showed how change could occur in organisms and be perpetuated. As long as variation was significant and diverse enough and traits could be inherited, there seemed to Darwin no end to the power of the mechanism. Over enough time (and geologists were saying that plenty of time had elapsed on this planet[19]), perhaps a great deal of the variation evident in nature today arose by the mechanism of natural selection. Darwin provided hundreds of pages' worth of evidence to support this idea in *The Origin of Species*, and added to it throughout the rest of his life.[20,21]

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[18]This example is taken from the work of David Lack (1954). See also Lack (1966).
[19]The most prominent was Lyell (1830).
[20]See, e.g., Darwin's longer work *The Descent of Man and Selection In Relation to Sex* (1871).
[21]This summary is incomplete even as an introduction of the most basic tenets of

3. PHASE 3: THE GENE AS A KEY TO INHERITANCE

Although Darwin's theory gained immediate support from some scientists, and eventual support from virtually all, one of the ways his explanation fell short was in his understanding of the basis for inheritance. He could not explain how it was that offspring tend to share their parents' characteristics. Through rediscoveries and new developments in genetics and molecular biology during this century, an explanation of the basis for inheritance has been furnished in terms of the *gene*.[22]

By far most physical structures that make up any living thing do not persist after the organism dies. Whether a structure persists throughout the life of an individual (like a brain) or whether it is continually replaced by similar or identical structures throughout the course of an organism's existence (like the cells of skin, muscle, bone, etc.), the persistence or replacement is halted at death, if not before. Genes, however, are exceptions. These physical structures are regions of chromosomes, which are found in the nuclei of most kinds of cells, in most living things.[23] Chromosomes are able to duplicate themselves (replicate), which they do on a regular basis. Under normal circumstances, whenever an organism reproduces, either sexually or asexually, parental genes become those of the

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evolutionary biology; for example, it does not describe the relationship between change in populations, just described, and the evolution of different kinds of creatures, from the level of species to kingdom. Such explanation is omitted here because it is not immediately relevant.

[22]The relevance of the gene to evolution is roughly introduced by the classic works Fisher (1930) and Haldane (1932); but is more explicit in such works as Haldane (1955); Waddington (1957); Hamilton (1964); and G. Williams (1966). Later works on the subject are Hull (1981); R. Dawkins (1976); (1982); and Maynard Smith (1988), ch.7, 13. There is debate over whether the gene is the *only* basis for natural selection (for other ideas see Wynne-Edwards (1962); and the very different R. Dawkins (1976), ch.11. Brandon and Burian, eds. (1987) is a collection of essays regarding this controversy). However, there is widespread agreement that the gene is generally the most significant basis in nature.

[23]Exceptions are bacteria, who do not have nuclei; and viruses, (to those who consider them living).

offspring. In this way, as long as reproduction continues successfully and without any interference or mistakes (which do sometimes happen), an organism's genes will exist forever; or, more accurately, exact copies will continually be produced of each gene transmitted to offspring.

Genes function in an organism by specifying the nature of traits, or characteristics of organisms. In some cases, these traits are specified by the genes in such a way that little variation is allowed in the outcome. For instance, genes specify the structure of certain chemical substances like hormones with such exactitude that in every member of a given species the structure of the hormone is identical. More obviously, normal humans are born with two eyes and two lungs; these traits are specified by genes with great rigidity. In other cases, the genes specify traits which are more variable. For instance, an organism's genes may specify a certain tendency towards aggression.[24] Throughout the course of life, however, aggression will be variable because of other considerations, including those particular to the situation and to the individual organism. So, although the content of a badger's genes will cause it to be generally more aggressive than a sheep, there is variability in this disposition. Any given badger is not always aggressive. When it does display aggression, it will not always be to the same extent. Two badgers in the same situation may react with differing levels of aggression. This does not mean that there is no genetic basis for a badger's aggression. Rather, it shows that there is no guarantee that all traits specified by genes will be immune to a range of masking, distorting, encouraging or discouraging influences perhaps related, but very often completely unrelated, to the specific gene(s) that are specifying the particular trait.

When offspring have only one parent, that parent ideally gives an exact copy of all of its own genes to the offspring. The only way in which

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[24]Wilson (1975), ch.11.

the genes of the offspring could be different than that of the parent is for there to be mistakes (mutations) in the replication. However, it is, of course, very common for organisms to reproduce in such a way that two parents, with different genes, are involved. In this situation, an offspring's set of genes (genome) is composed of a combination of that of each parent, barring mutations. The assortment of the parental chromosomes in the formation of an offspring's genome is such that no complete prediction of an offspring's genome is possible. In addition, there are so many ways in which the parental chromosomes can combine, including the occasional exchange of parts of chromosomes, that in the vast majority of creatures the probability of going through the reproductive process twice and producing two offspring with identical genomes is so low as to be practically non-existent. So, genetics provides a mechanism for the inheritance of traits and explains why offspring exhibit variation.

When discussing matters not in terms of individual offspring, but in terms of a group of individuals of a species that live in the same general area (viz., population), this genetic mechanism fills in the gap in Darwin's understanding of how certain traits increase in frequency in a population whereas others decrease in frequency. Such a change in gene frequency in a population is basically evolution, translated into genetic terms. It so happens that no such change would occur were populations always large, mates always chosen at random, mutations very rare, and all individuals regardless of genetic variation equally likely to survive and breed. Nature is not like this, however, and any of these conditions not being met is enough to make gene frequency change, and thus evolution, likely. The robin example cited earlier as an example of natural selection, is an instance of the fourth condition not being met. To restate that example in genetic terms: Robins whose genetic makeup specifies a tendency to lay either too few or too many eggs will tend to die out more quickly than robins whose genetic

makeup specifies a tendency to lay the right number of eggs. As the disadvantaged robins die out, their genetic information dies with them. As the advantaged robins survive, their genetic information is perpetuated. In this way, the portion of a robin's genome which specifies the laying of the right number of eggs will tend to persist in a population of robins.[25]

Some have nicknamed this aspect of nature the 'survival of the fittest'. In the context of genetically updated evolutionary theory, this term simply refers to the fact that genetic information which specifies a trait harmful to itself tends to decrease in abundance in a population, whereas genetic information which specifies a trait beneficial to itself tends to persist, all other things being equal. Whether a trait is harmful or beneficial will depend on the nature of the organism that bears the genetic information, as well as the nature of the environment, including other organisms and nonliving things. Genetic information persists only in individual organisms; but since what are inherited are the genes, they are the ultimate drivers of evolution. The explanatory power of this idea has prompted the evolutionary biologist John Maynard Smith to claim of his field that 'the most exciting thing to have emerged is what might be called a "gene-centred" view of evolution'.[26] This 'gene's-eye view of Darwinism'[27] has facilitated an understanding of many previously confusing situations in nature, including the resolution of the so-called 'paradox of altruism', which has led to the particular naturalist meta-ethic which will be discussed in this chapter. First, however, the subdiscipline of evolutionary biology within which the paradox of altruism was encountered will be introduced.

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[25]This assumes that differences in genetic makeup are generally responsible for differences in the numbers of eggs robins lay. David Lack's work does clearly establish this ((1954); (1966)).

[26]Maynard Smith (1988), 59.

[27]R. Dawkins (1989a), ix.

B. Sociobiology and the Biological Basis for Altruism

In 1975, Harvard biologist E. O. Wilson wrote *Sociobiology: The New Synthesis*, in which he defined the new field as 'the systematic study of the biological basis of all social behavior'.[28] Ironically, whilst a 1989 poll of the international Animal Behaviour Society rated the book the single most important work on animal behaviour of all time, dethroning even Darwin's contributions to the subject, the book also incited what may be 'the only occasion in recent American history on which a scientist was physically attacked, however mildly, simply for the expression of an idea.'[29] Some have believed this widely varying but thoroughly zealous reaction to sociobiology to be the inevitable reaction to a current 'paradigm shift' in scientific thought of the sort that Thomas Kuhn spoke about.[30] Richard Dawkins, however, who wrote *The Selfish Gene*-- the other of the 'two epoch-marking books that synthesized and publicized' sociobiology[31]-- stressed the scientific precedent for his claims. He expressed his belief that although sociobiology may revolutionise the humanities, its scientific basis had been long understood. In fact, in a significant sense it simply extended themes present in Darwin's own work.[32] Whether a paradigm shift in progress or just an overdue realisation of the implications of scientific advancements made long ago, the science of sociobiology is rooted in the concept which was seen to be fundamental to the modern understanding of biological evolution in general: the gene.

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[28]Wilson (1975), 4.
[29]Wilson (1994), 330, 307-8. At an American Association for the Advancement of Science event in Washington, D.C. in 1978, a group of demonstrators stormed the stage and poured a pitcher of ice water on Wilson's head.
[30]Kuhn (1962). R. Wright (1994), 6 invokes the Kuhnian phrase in his description of sociobiology, in a section entitled 'A Quiet Revolution'. Wilson (1994), 319-20 says that a 'paradigm shift' was an appropriate description of his own experience as well.
[31]R. Dawkins (1976). Hereafter citations will be from the second edition, (1989a). The quote is from R. Wright (1994), 4.
[32]R. Dawkins (1989a), Preface to the 1989 Edition, and p.1.

1. GENES AND BEHAVIOURAL TENDENCIES: CENTRAL ISSUES

Explanation of the science of sociobiology is perhaps best accomplished in the context of four issues, characterised by various extents of controversy, which are an integral part of the science. These issues are the biological continuity between animals and humans, the innate versus the acquired, free will versus determinism, and the adaptationism debate. With respect to each issue sociobiology is predicated on the truth of a certain range of positions, and in each issue the gene plays a central role.

a. *The animal heritage of* Homo sapiens

94% of the text of Wilson's *Sociobiology* deals with the nonhuman animal world.[33] However, his last chapter opens with 'Let us now consider man in the free spirit of natural history...', and proceeds to explain human behaviour in the same terms that were used to explain that of ants, lions, and chimpanzees.[34] An argument can be made that this continuity is reasonable from two related perspectives. First, as far as our genes are concerned, there seems no reason to believe that humans should be treated differently in a scientific treatise than any other animal. As the physiologist Jared Diamond points out:

> 'The genetic distance (1.6%) separating us from pygmy or common chimps is... less than that between two species of gibbons (2.2%), or between such closely related North American bird species as red-eyed vireos and white-eyed vireos (2.9%), or between such closely related and hard-to-distinguish European bird species as willow warblers and chiffchaffs (2.6%). The remaining 98.4% of our genes are just normal chimp genes.'[35]

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[33] Wilson (1994), 332.
[34] Wilson (1975), ch.26.
[35] Diamond (1991), 19. He then argues that we would be classified by a nonhuman

Genes are the subject matter of sociobiology,[36] so it is understandable that Wilson would have stressed a continuity between the sociobiology of humans and that of other animals. The second perspective from which it may be sensible to stress a continuity between humans and other animals is that of evolution. Darwin said 'Man in his arrogance thinks himself a great work... More humble and I think truer to consider him created from animals'.[37] Seeing humans as a result of an evolutionary process which also produced many other creatures may be used as a defence of sociobiology's assumption that humans can be understood by the same methods that are used with other animals.

In order for sociobiology to produce accurate results regarding humans, the arguments from these two perspectives (the genetic and the evolutionary) must be valid. To what extent this is the case is a matter for debate,[38] but hereafter in this thesis they will be accepted as necessary working assumptions in human sociobiology, and so the basis of the discipline will not be challenged. In the minds of many, this is a too generous allowance,[39] but without it any discussion of a sociobiology-based meta-ethic would halt before it had begun. A related issue, which provides just as significant a stipulation for human sociobiology, is the matter of the extent to which the genes are responsible for variation in humans. In the views of some, scientists operating from the genetic perspective have often encroached on the domain of the environmental, or the acquired. This is the second of the issues discussed here as central to sociobiology.

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zoologist as a third species of chimpanzee, rather than in a completely different genus. Our close biochemical relationship to the chimps is also described in Pilbeam (1984). Others who stress our kinship with animals include Gould (1980a); Flew (1984); Rachels (1990); Leakey and Lewin (1992); R. Wright (1994); Dennett (1995); and Matt Ridley (1996).

[36]Wilson (1975), ch.1; and R. Dawkins (1989a), esp. ch.1,4.

[37]Darwin (1836-44), 300. This quote is from 1838.

[38]Two ways into the issue are M. Dawkins (1986), ch.10; and Symons (1992).

[39]e.g. Sahlins (1976).

b. *Innate versus acquired and the significance of culture*

As long as evolutionary biologists confined their talk to anatomical structures such as fins, thumbs or brains, there was little opposition to the idea that the genes played a crucial role in their evolution.[40] Since sociobiology deals with social *behaviour*, a novel issue arises: the tendencies towards specific behaviours might also be rooted in environmental influences. In fact, what has been called the 'standard social science model' involves the belief that environmental considerations outweigh innate ones to such a degree as to render the latter insignificant.[41]

Moreover, even if an evolutionary origin is postulated for certain behaviours, the means for such an origin does not have to be at all *genetic*. The role of culture has long been recognised as a nongenetic agent of evolutionary change, by a sort of Lamarckian 'inheritance of acquired characteristics' through such things as oral tradition.[42] Despite the prominence of this view, E. O. Wilson describes the work of sociobiology as follows:

> '...each phenomenon is weighed for its adaptive significance and then related to the basic principles of population genetics... The principal goal of a general theory of sociobiology should be an ability to predict features of social organization from a knowledge of these population parameters combined with information on the behavioral

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[40] S. Gould (1981), 328-9. By 'brains' is meant here the general size and gross structures; it is realised that on a finer level, one's occupation, for example, may result in actual anatomical changes in the brain (e.g. linguists may develop larger Wernicke's (#44) and Broca's (#22) areas, which are involved in language comprehension and speech respectively).

[41] Tooby and Cosmides (1992).

[42] T. H. Huxley believed that cultural transmission, facilitated by language, was what has made us so different behaviourally from other animals ((1863), 132). This view was also held by Asa Gray ((1880), 103-6). Among the vast literature on the subject of cultural 'inheritance' are James (1890), vol.2, 633-40; J. Baldwin (1897); J. Huxley (1942); Waddington (1960a), 381-402; (1961); Dobzhansky (1963); Cloak (1975); Medawar (1977); Piaget (1978), ch.2; Gould (1978), ch.32; Cavalli-Sforza and Feldman (1981); J. Ball (1984); Boyd and Richerson (1985); R. Dawkins (1989a), ch.11; Durham (1991); Sober (1991); Dennett (1991), ch.7; (1995).

> constraints imposed by the genetic constitution of the species.'[43]

So, sociobiology's success as a science depends on the significance of those constraints which the genes place on behaviour. The more behaviour tends to be constrained by genetic information, the more sociobiology will be able to explain that behaviour. The less genetically constrained behaviour tends to be, the less explanatory power sociobiology will have. Wilson, realising this, has attempted with C. J. Lumsden to incorporate cultural influences in the sociobiological view of human nature, still asserting the primacy of the genes.[44] The efficacy of their attempt has been questioned by many,[45] but regardless of the truth of their claims it remains the case that it is only to the extent that cultural influences by themselves are *not* the basis for the evolution of social behaviour, that sociobiology can be successful.

This stipulation holds true for human nature as well. It is only to whatever extent human psychology is *not* governed by cultural or other experiences that human sociobiology is a viable discipline. If flexibility, as Wilson's critical colleague Stephen Jay Gould believes, is 'the most important determinant of human consciousness', and if biologically speaking 'We are, as Simone de Beauvoir said, "l'être dont l'être est de n'être pas"--the being whose essence lies in having no essence,'[46] then sociobiology of humans is fundamentally wrongheaded. On the other hand, if 'the organism is only DNA's way of making more DNA',[47] if we are 'survival machines--robot vehicles blindly programmed to preserve the selfish molecules known

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[43]Wilson (1975), 4-5. See also p.21-22, 67.
[44]Lumsden and Wilson (1981); (1983).
[45]In Wilson's own terms, 'those in several key journals were unfavourable: Edmund Leach was enraged in *Nature*; Peter Medawar was contemptuous in the *New York Review of Books*; Richard Lewontin, by his own later description, was nasty in *The Sciences*. The subject of gene-culture coevolution simply languished, mostly ignored by biologists and social scientists alike.' (1994), 352-3. See also Kitcher (1985); S. Gould (1988), ch.7; Maynard Smith (1988), ch.8.
[46]S. Gould (1978), 257, 259.
[47]Wilson (1975), 4.

as genes',[48] then human sociobiology is the *only* legitimate science of human nature.

There are many intermediate positions available, and all three of the scientists quoted in the last paragraph have at times endorsed or at least opened the way for a more moderate view of the relationship between innate and acquired behavioural traits than may be evident in the quotes above. Wilson in *On Human Nature* does make room for a significant degree of learning within the range of effects specified by the genes.[49] Dawkins is more accommodating of acquired characteristics, suggesting that learning is so prominent in human culture relative to genetic specification that when speaking of human social behaviour 'we must begin by throwing out the gene as the sole basis of our ideas on evolution'.[50] From the other direction, Gould, in a (rare) move towards reconciliation with sociobiologists, writes that 'I am willing to admit... our selfish and aggressive urges may have evolved by the Darwinian route of individual advantage' and our 'altruistic tendencies... may have arisen by the same Darwinian route'.[51] Whatever the balance between our experience and our genetic heritage, the stipulation remains that sociobiology's success as a science depends on the degree of significance of the latter factor. That it is significant at all is thus another working assumption of sociobiology that will not be challenged in the examination to follow, although others have seen it as a fatal flaw.[52]

As a final remark, recent work in genetics and developmental biology shows that the innate/acquired balance is not sufficiently described in terms of opposing percentages of each, as is often popularly believed.[53] Sociobiologists talk of genetically-based 'channels of human mental

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[48]R. Dawkins (1989a), v.
[49]Wilson (1978), ch.2-3.
[50]R. Dawkins (1989a), 191.
[51]S. Gould (1978), 265-6.
[52]e.g. Sahlins (1976); S. Gould (1981); Lewontin, Rose and Kamin (1984).
[53]Actually, this was realised by some scientists decades ago: e.g. Lehrman (1953); Schneirla (1956); and Hailman (1967).

development' where 'genes prescribe the *capacity* to develop a certain array of traits', and that array can be narrow or vast.[54] Learning operates within the bounds instituted by that array, and so on a different level from the function of the genes. Furthermore, studies have shown that during development, information from the environment is intimately related with gene function: 'Each developmental change is influenced by the interaction of genes and environment, and also affects the next stage of this interaction'.[55] From this perspective, 100% of human behaviour is genetically based (since our channels or capacities for learning are functions of our genes), and 100% is environmentally based (since without any experience those channels or capacities would remain unexploited). This is why such scientists believe the 'acquired' not to be in opposition to the 'innate'; rather, they are 'cooperating partners'.[56] If this is the correct way of looking at the situation, the innate/acquired balance is not adequately explained simply by attaching percentages to each element. Indispensable to the explanation is the issue of the relative broadness or narrowness of the channels and capacities specified by the genes, and thus the range over which learning can effectively operate. This in turn must be taken together with the intricate interactions which occur during development.[57] This understanding of the relationship between the innate and the acquired should therefore be understood as sociobiology is presented with the stipulation that genetic considerations be significant in the explanation of behavioural variation in humans.

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[54]Wilson (1978), 56. See also Waddington (1957); R. Dawkins (1982), ch.2; and Maynard Smith (1988), ch.9.

[55]Barnett (1988), 114. See also Barnett and Dickson (1984) and references therein.

[56]J. Gould and Marler (1987). See also Bateson (1976); R. Dawkins (1981); M. Dawkins (1986), ch.4; and Ruse (1989), 164-6.

[57]Many works still do use percentages, i.e. Plomin, *et al* (1990); and Loehlin (1992). However, most of them use wording that allows them to accept the co-operation of the innate and acquired described above. Plomin *et al* find that certain behavioural traits will appear in offspring of parents with those traits 40-60% of the time. Loehlin believes that certain behavioural differences between individuals can be traced to genetic differences 30-40% of the time.

c. *Free will vs. determinism*

Regardless of where the balance lies regarding the importance of the environment and the genes to human psychology, one must still deal with the issue of whether and to what extent both of these considerations together constrain our behaviour. Sociobiologists are far from unified, or clear, in their explanation of their positions on this perennial issue, although opponents to sociobiology often characterise them uniformly as 'biological determinists'.[58] The two most prominent popularisers of sociobiology, Wilson and Dawkins, both vary when describing their positions on this issue, but neither of them can be branded as a strict determinist except on a very selective reading. It is true that both Wilson and Dawkins use metaphorical language that neglects the capacity for individual decisionmaking and leaves no room for opposition to genetically based tendencies. Wilson says of genes that 'the individual organism is only their vehicle, part of an elaborate device to preserve and spread them with the least possible biochemical perturbation'.[59] Dawkins in the same spirit calls us 'survival machines' and 'robots'.[60] Vehicles, devices, machines and robots obviously do not have any power to act against the purpose for which they were built by deciding to do so. Nor can they act for ends which they have chosen regardless of their predispositions. These metaphors, therefore, must be seen to have very limited applicability, for both Wilson and Dawkins believe that human beings *can* do those things. Wilson says plainly that 'people have free will and the choice to turn in many directions',[61] and that in cases where we 'are forced to choose among the elements of human nature' but find them irrelevant in today's world, we can

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[58]Allen, E., *et al.* (1976); S. Gould (1978), ch. 30, 32; Lewontin, Rose and Kamin (1984).
[59]Wilson (1975), 3.
[60]R. Dawkins (1989a), v, 19-20.
[61]Wilson (1994), 332.

break away from them 'through an exercise of will'.[62] Because of this phenomenon, he is led to postulate that 'individual free will probably will remain forever invulnerable'.[63] These statements may be less deterministic than usual for Wilson,[64] but they exemplify the fact that a variety of positions regarding this issue are possible among sociobiologists. Dawkins uses less deterministic language than Wilson on the whole, repeatedly urging us to rebel against our genetic tendencies: 'We have the power to defy the selfish genes of our birth... we have the power to turn against our creators. We, alone on earth, can rebel against the tyranny of the selfish replicators.'[65] Although some have found in this a blatant contradiction,[66] the sociobiologists disagree:

> 'I *think* that Rose and his colleagues are accusing us of eating our cake and having it. Either we must be "genetic determinists" or we believe in "free will"; we cannot have it both ways. But-- and here I presume to speak to Professor Wilson as well as for myself-- it is only in the eyes of Rose and his colleagues that we are "genetic determinists". What they don't understand (apparently, though it is hard to credit) is that it is perfectly possible to hold that genes exert a statistical influence on human behaviour while at the same time believing that this influence can be modified, overriden or reversed by other influences... We, that is our brains, are separate and independent enough from our genes to rebel against them. As already noted, we do so in a small way every time we use contraception. There is no reason why we should not rebel in a large way, too.'[67]

With this moderate position allowable within sociobiology, there is no need to discuss the free will/determinism issue any further in this context. Sociobiologists need not be, and the most prominent are not, opposed to the concept of free will. The only stipulation for the operation of sociobiology

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[62]Wilson (1978), 196.
[63]Wilson (1980), 28.
[64]More deterministic passages are (1975), 3-4; (1978), 167; and (1990), 253.
[65]R. Dawkins (1989a), 201.
[66]Stent (1979); Flew (1984), 118-9; Lewontin, Rose and Kamin (1984).
[67]R. Dawkins (1989a), 331-2.

is that 'free will' cannot be taken to mean the absence of any involuntary tendencies towards certain behaviours. For sociobiology to be a legitimate discipline, there must be predisposition. Free will, when postulated at all, cannot be represented as the abolishment of predisposition, but rather as the possibility that predispositions can be overruled.

d. *Adaptationism*

A fourth issue, and the last to be discussed here, that looms large in discussions of sociobiology, is to what extent psychological/behavioural traits are relevant to survival, such that genetic information specifying a given trait will tend either to proliferate or to decline in a population *because of that relevance*. As this is sometimes phrased, to what extent are these traits 'targets of natural selection'? In Stephen Jay Gould's words, 'Must all features of organisms be viewed as adaptations?'[68] Darwin realised that he may have begged this question in *The Origin of Species*:

> 'I had not formerly sufficiently considered the existence of many structures which appear to be, as far as we can judge, neither beneficial nor injurious; and this I believe to be one of the greatest oversights as yet detected in my work.' [69]

Insofar as one believes that features must be viewed as adaptations, one adheres to *adaptationism*.

It has been established, however, that there are other ways in which traits proliferate in a population. One is 'genetic drift',[70] where the (usually geographic) isolation of a small group can result in a straying of genetic information away from that which was the average in the larger parent population. For instance, if a group of turtles which happened to have a relatively high incidence of a certain heritable feature floated on rafts of

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[68]S. Gould (1980a), 16.
[69]Darwin (1871), 152.
[70]S. Wright (1932); (1959); Mayr (1942), 237. Mayr warns against an overuse of this idea, however, in (1982), 555.

debris to an island previously unpopulated with turtles from which they could not escape, over the generations the turtles on that island would continue to have that feature more often than turtles on the mainland, unless of course the feature was harmful to them.

Inbreeding, and breeding in populations where individuals generally breed with close neighbours and rarely move far away, will also cause certain traits to become common in a population without their being adaptive. Another commonly discussed way is by what Darwin called the 'principle of correlation',[71] and what is now split into two variants. *Chromosomal linkage* describes the relationship between genes on a chromosome whereby they tend to be inherited together.[72] *Pleiotropy* describes the situation where one gene or gene complex affects more than one trait. The commonality between these two concepts is that one trait will regularly accompany another. Darwin noticed 'quite whimsical' examples of this: 'cats with blue eyes are invariably deaf... hairless dogs have imperfect teeth... pigeons with feathered feet have skin between their outer toes'.[73] In a case where two traits are specified by a pleiotropic gene, for example, and one is beneficial whereas the other is neutral or even slightly harmful ('slightly' relative to the benefit of the other trait), the latter trait will still tend to proliferate in a population over the generations, because it has 'hitch-hiked' on the advantage bestowed by the former trait.

A concept which, if appropriate to social behaviour, could function as an alternative to adaptationism is what might be called 'multifunctional traits'. Screwdrivers were invented for a particular purpose, but are often used to do such varied tasks as opening paint cans, removing bicycle tyres and bypassing ignition switches. Likewise, some features of organisms

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[71]Darwin (1871), 130-1, 151.
[72]Note: This is not always the case; a phenomenon known as 'crossing over' results in chromosomes being split into portions.
[73]Darwin (1859), 11-12.

which were initially adaptive in one capacity may be exploited in ways completely unrelated to their initial advantage. This is not necessarily a departure from adaptationism, but in the realm of behaviour it often is. One writer has proposed that

> 'Man's large brain was doubtless developed originally because it was an advantage to him to make and use tools, to reason about environmental conditions, and so on. But the mental capacities that were developed for these purposes could then be used in other ways'.[74]

Social behaviours could be traits which are capable of being exhibited by a brain which had evolved to its present level of complexity on other bases. In this way, social behaviours would be common without being adaptive. On the other hand, both sociobiologists and their critics agree that sociobiological explanations are explanations in terms of a social behaviour's adaptiveness.[75] Since there are other ways in which these traits may become established in a population besides their being beneficial to survival, the sociobiologist is not immune to scrutiny on this point. No assumption is possible here without begging the question. Each time a sociobiologist claims a social behaviour to have arisen because of its adaptive value, that claim must be accompanied by evidence of that value. Hereafter, this issue will not be raised as long as this stipulation is respected.[76]

Sociobiology, then, is the study of the biological basis of social behaviours, where that basis is explained in terms of the genetic specification of those behaviours. Two working assumptions in the field are

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[74]Rachels (1990), 59. This point is often made; e.g. Ayala (1987) and S. Gould (1988), 122.

[75]Wilson (1975), 4, 21-2; Alexander (1979); S. Gould and Lewontin (1979); Trivers (1985); S. Gould (1988), 30-31; Ruse (1989), 161-2

[76]A general discussion about adaptation is M. Dawkins (1986), ch.1. Critical assessment of alternatives to adaptationism is provided more fully in Dobzhansky *et al.* (1977); Lewontin (1978); S. Gould (1980a); Provine (1985); and Cronin (1991), ch.4. Criticism of sociobiological adaptationism can be found in S. Gould and Lewontin (1979); and S. Gould (1988), ch.2, 7.

the continuity between humans and other animals by virtue of our common evolutionary history and genetic makeup; and the significance of the role of genetic makeup relative to that of the environment in shaping social behaviour. Furthermore, sociobiology does not necessitate any kind of determinism of human behaviour. Lastly, although sociobiology is not theoretically constrained to adaptationism, the discipline most often proceeds by explaining traits in terms of their adaptive value.

2. SURVIVAL OF THE ALTRUIST

a. *The paradox of altruism*

The 'central theoretical problem of sociobiology'[77] is also the problem whose solution has led to the naturalist meta-ethic which will be discussed in this chapter. This problem can be framed in terms of a paradox. Natural selection operates in such a way that organisms with self-destructive genes will not be preserved. An entity is altruistic, biologically speaking, insofar as it 'behaves in such a way as to increase another such entity's welfare at the expense of its own';[78] therefore, altruism is self-destructive behaviour. The paradox arises as one realises that the natural world is replete with examples of altruism. Ground squirrels give alarm calls which render the one giving the alarm more conspicuous to the predator.[79] Reed buntings spend inordinate time and energy raising babies of cuckoos.[80] Dwarf mongooses often baby-sit for nonrelatives.[81] Vampire bats share food in times of shortage.[82] Wolves exercise restraint in fights with each other.[83] Olive baboons and stickleback fish arrange themselves into

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[77]Wilson (1975), 3.
[78]R. Dawkins (1989a), 4.
[79]Dunford (1977).
[80]Davies and Brooke (1991).
[81]Rood (1978).
[82]Wilkinson (1984).
[83]Lorenz (1964), 186-9.

alliances where others will come to the aid of one in trouble.[84] And, most significantly, humans have that 'peculiar institution'[85] known as morality, whereby we often feel or think that we ought to do things which place concern for self second to that for others. Given the assumption behind sociobiology that behaviours have arisen because of their adaptive value, and the bias towards self-preservation inherent in natural selection, one would expect altruistic creatures not to persist in nature. Why, then, is this not the case?

b. *Attempted solution: group selection*

Some have thought that an explanation for altruism could lie on a level of natural selection that is other than the genetic. These scientists have thought that 'adaptations could be for the good, not of the individual, but of the group or population or species or some other level higher than the individual'.[86] Although through the 1960's the view was popular,[87] other writers have claimed that in most cases it was 'the woolly world view of some early work in ecology that fuelled this episode in Darwinian theory'.[88] In a search for holism in biological science, ecologists saw no reason to refrain from postulating natural selection on any level of the hierarchy of life: the family, the population, the species, even the biosphere. As the role in evolution of replicating genetic information became clearer to the scientific community, the realisation grew that there was no such replicator at the level of the group, and so it seemed that 'group selection' was not possible. This realisation was fostered by the work of George C. Williams

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[84]Packer (1977); Milinski (1987).
[85]A phrase used by B. Williams (1985), ch.10. He does not relate morality to altruism or sociobiology, however. For him the 'peculiarity' is the sense of obligation; here it is the contradiction between morality and natural selection.
[86]Cronin (1991), 275.
[87]E.g. Allee (1938); (1951); Allee *et al* (1949); Emerson (1960); Wynne-Edwards (1962); (1963); (1964).
[88]Cronin (1991), 278.

and David Lack, both of whom wrote in vehement opposition to the group selection theory of V. C. Wynne-Edwards.[89] This debate has continued into recent years.[90] The suggestion has been made that 'the assumption that selection almost invariably centres on the individual is crucial to the theories and conclusions of the sociobiologists'.[91] Whether or not this is the case, group selection is not generally a part of sociobiologists' resolutions of the paradox of altruism, and so hereafter it will be ignored.[92]

c. *Solution part 1: kin selection*

Sociobiologists have not found much difficulty in developing mechanisms for altruism apart from the idea that natural selection might favour a healthy group in its own right. In fact, the hypothesis that a phenomenon known as *kin selection* might be widespread in nature paralleled the realisation that genetic material was the basis for natural selection. The two consecutive papers written in 1964 by William Hamilton which first thoroughly explain this idea have been said to be 'among the most important contributions to social ethology ever written'.[93]

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[89]Williams (1966), esp. 92-124; Lack (1966). See also Maynard Smith (1964).

[90]Wynne-Edwards recanted in 1978. In the words of Richard Dawkins: 'Magnanimous these second thoughts may have been, but unfortunately he has had third ones: his latest book re-recants' (R. Dawkins (1989a), 297). For another group selectionist, see Wade (1976) and (1977), although he criticises prior models of group selection in (1978). Other discussions are Maynard Smith (1976); Hull (1981); Grafen (1984); R. Dawkins (1982), 81-117; (1986), 128-38, 265-9; (1989a), ch.7; Cronin (1991), ch.12.

[91]Ruse (1980), 34.

[92]Part of the problem of group selection stems from two facts: first, some use the term liberally, even to represent levels of selection that ultimately rely on the gene. See, for example, Wilson (1975), ch.5. Second, even ardent anti-group selectionists are beginning to allow for higher-level selection in certain circumstances. For instance, certain groups may be better at evolving than others, which would create a second-order natural selection of groups (R. Dawkins (1989); Cronin (1991), 289-91). Several writers have also noticed that reciprocal altruism (q.v.) brings about distinctiveness in the gene pool of a close-knit group, which would allow for one group to be more likely to persist than another (Mackie (1978); Singer (1981), 19ff; R. Dawkins (1981)).

[93]Hamilton (1964). The quote is from R. Dawkins (1989a), 90. Among the other places where kin selection is described are: Wilson (1975), ch.5; Singer (1981), ch.1; M. Dawkins (1986), ch.3; R. Dawkins (1989a), ch.6-8; Cronin (1991), ch.11-13; Mark Ridley (1995), ch.10.

The only reason why natural selection as it has been described here tends to preserve one organism over another is because there is a certain advantage to be gained from an organism having a specific genetic makeup. However, in situations where more than one individual have a similar genetic makeup, natural selection can occur as long as *any individual with the relevant genetic makeup gains the advantage*. When a gene is advantageous, it tends to persist in a population in whatever organism possesses that gene. This means that if a parent possesses what in some way is an advantageous genome, that parent's offspring will tend to possess a similarly advantageous genome as well, for offspring possess their parents' genes. The genetic material of a parent who did not take care of its offspring would obviously not survive through the generations, because a crucial way for an organism's genes to persist is in the form of offspring. However, and this is where kin selection becomes relevant, offspring are *not the only way* in which an organism's genes can persist. That organism had parents of its own, and those parents had parents, all sharing genes. At each fork in the family tree, any offspring will share a certain percentage of their genes with each other because they share the same parents. This is why siblings have more similar characteristics than cousins, which have more similar characteristics than second cousins. Theoretically, two siblings could differ completely from each other, if each were bequeathed with entirely different genes from each other. Just as improbably, two siblings might share all of the same genes, and thus not differ at all. Understandably, then, siblings will on average share the mean percentage between these extremes, or 50%, of their genes. Following the mathematics of relationships between more extended kin, nieces and nephews share an average of 25% of their genes with their aunts and uncles; and cousins share an average of 12.5% of their genes with each other. This is the basis for the light-hearted comment of J. B. S. Haldane that he would find it worthwhile to save two siblings or eight

cousins from drowning;[94] for this many of each kin type would possess, on average, 100% of his genes. So, as far as natural selection is concerned, there is no distinction made between one individual and eight of his cousins.

On this model, natural selection could even favour self-sacrifice. Take, for example, a colony of bees, any of which will die after delivering a sting. An individual protecting the nest is effectively protecting many times its own genes, for all of the members of the colony share genes. If a bee is genetically predisposed to react by fleeing when the nest is attacked, that bee will survive but its nest may not; in which case, many others with that bee's genes who are still in the nest will perish, and with them will perish the genetic predisposition to flee an attack. On the other hand, if a bee stings the attacker of a nest, that bee will die, but the nest will stand a better chance of survival. Since the nest contains so many relatives, and thus so many times the individual's genetic information, the net result is that all of those survivors will live to reproduce, passing along that genetic predisposition to sting an attacker of the nest.

Some have raised the objection at this point that 'fractions are of very rare occurrence in the world's languages... I refrain from comment on the even greater problem of how animals are supposed to figure out' the percentage of genes they share with others.[95] This is an ill-conceived objection, for there is nothing in the model of kin selection that necessitates that animals *know* the percentage of genes they share with others. The fact of the matter is that if their genes predispose them to save their kin to a certain extent, then they will tend to survive longer than those who do not. The bees need not *actually know* that they share genes, or how much they share; they need only *effectively show* certain behaviours in certain circumstances. Richard Dawkins makes this point:

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[94]Haldane (1932); (1955).
[95]Sahlins (1976).

> 'A snail shell is an exquisite logarithmic spiral, but where does the snail keep its log tables; how indeed does it read them, since the lens in its eye lacks "linguistic support" for calculating *m*, the coefficient of refraction? How do green plants "figure out" the formula of chlorophyll?'[96]

Still, an organism needs to have some cue that there are kin about, in order to be able to behave differently from when there are not (there would be no evolutionary advantage for a bee to defend a nest that wasn't its own). Such differentiation is made in various ways. Familiar cues for kin among animals include specific odours (cue=I smell someone familiar), specific locations (cue=I am around the home), or specific sounds (cue=I hear familiar buzzes or grunts). The way in which paper wasps determine whether there are kin about is by the detection with their antennae of certain chemicals present on the external surface of others. If these chemicals are removed, a wasp will not be able to distinguish a foreign individual from a nestmate.[97] When an organism possesses any such means of distinguishing kin from non-kin, kin selection is possible. Much work has been done in determining means of kin recognition, including among humans.[98]

d. *Solution part 2: reciprocal altruism*

Kin selection cannot be the only solution to the paradox of altruism, for many instances of altruism in nature do not involve relatives. The common phrase 'you scratch my back and I'll scratch yours' is often used to characterise the second model which has contributed to a solution of the paradox of altruism; perhaps a more accurate representation would be 'I scratch your back and hope that you'll scratch mine'. Following Haldane's talk of rescuing drowning people, Robert Trivers in 1971 suggested that he

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[96]R. Dawkins (1979). Eleven other possible misunderstandings of kin selection are also dealt with in this paper.
[97]Singer and Espel (1992).
[98]Chagnon and Irons, ed. (1979); Fletcher and Michener, ed. (1987); Barnard (1991); Hepper (1991).

would find it worthwhile to rescue a drowning person in the hope that the favour might be returned at some time in the future.[99] Of course, all of this talk is metaphorical, and refers to the fact that natural selection favours co-operation in certain circumstances. The political scientist Robert Axelrod has most fully developed this theory, along with William Hamilton.[100]

It is obvious in certain cases that two individuals would tend to survive more often if they engaged in a programme of mutual aid than if they acted alone, in hunting or defence for example. The question which Trivers, Axelrod and Hamilton attempted to solve, however, is how such co-operation could have evolved, for it seems that the most advantageous situation for an organism's genes would be for that organism to receive aid and then never return the favour. In other words, cheating is more profitable than fairness in co-operation.[101] Axelrod found, however, that this would not be the case in social animals, when individuals are likely to meet each other many times throughout their lives and have the opportunity to withdraw help from those who are disposed to cheat. If *x* cheats *y* and *z*, natural selection would favour *y*, who ceased helping *x* in the future, over *z*, who continually gave aid to *x* without any favours being returned. In this illustration, *x* is called a 'cheat', *y* a 'grudger', and *z* a 'sucker'. Natural selection among those disposed to aid others (i.e., non-cheats) will therefore favour a grudger over a sucker. Moreover, if (and only if) there are enough grudgers about, a cheat will eventually suffer because of a difficulty in finding others to aid him in times of trouble. The grudgers and suckers in

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[99] Trivers (1971). See also Trivers (1985), 361-94.

[100] Axelrod and Hamilton (1981); Axelrod (1984), esp. 88-105. It is also discussed in Wilson (1975), ch.5; Singer (1981), ch.1; M. Dawkins (1986), ch.3; R. Dawkins (1989a), ch.9, 10; Cronin (1991), ch.11, 14; Mark Ridley (1995), ch.10.

[101] The analysis that leads to this conclusion has been well-established, thanks to a model often used in game theory known as the Prisoner's Dilemma. In this model, two prisoners awaiting sentence for a jointly committed crime must independently decide whether to confess (cheat) for a lighter sentence, or remain silent (co-operate). If each looks out for his own interest, both will confess rather than co-operate. See, e.g. Gauthier, ed. (1970).

the population, on the other hand, will continue to aid each other (for the grudgers only grudge those who cheat them). Thus, as long as a critical percentage of the co-operators in a population tend to be grudgers rather than suckers when they are cheated, co-operation will be adaptive, and those who do not reciprocate will tend to die out before those who do.

Two issues become important at this point. First, how does a population reach the level of grudgers necessary for reciprocal altruism to work? For otherwise, the cheats will continually dominate the population. Axelrod has postulated several properties which he believes could work towards the establishment of grudging, including a penchant for retaliation against cheats. In addition, kin selection might operate in certain groups until sufficient co-operation occurred for reciprocal altruism to take root. Still another possibility is that a population without reciprocation will not be as successful as one with it, and so a sort of group selection could result in the success of small groups with sufficient grudgers. A second issue is analogous to the kin recognition problem: there must be a way for organisms to recognise fellow reciprocators and avoid cheats. The solution to this problem is also analogous to that of kin recognition. As Helena Cronin writes,

> 'they don't need a highly developed brain, or any brain at all, to manage this; as we noted with kin selection, any functional equivalent to intelligent discrimination will do. It could be constant contact between two mutually dependent species, such as a hermit crab and its sea-anemone partner. or it could be a unique meeting place, such as the reliable locations adopted by fish that need their parasites removed and those that remove them.'[102]

As social interactions become more advanced, however, and a creature is likely to relate with several others, memory will become more important. If creatures in a community cannot remember whether and which individuals

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[102]Cronin (1991), 259.

cheated yesterday, they will not be able to respond appropriately by grudging today. Therefore cheats will flourish and reciprocation will eventually fail in that community.

e. *Solution part 3: manipulated altruism*

Altruism is seen in nature in still other circumstances, where neither relatives nor reciprocation is involved. Neither kin selection nor reciprocal altruism can explain such cases, but a third factor can explain at least some of them: manipulated altruism. Genetic information that specifies behaviour that is advantageous to a certain individual does not have to produce the behaviour *in that individual*. The situation could, on the other hand, be such that a behaviour is elicited in another individual, even of another species. An obvious example is the familiar 'eye-spots' of butterflies, which tend to elicit a behaviour of avoidance in predators who automatically associate large eyes with a large body. A more straightforwardly altruistic example of genetic material in one creature eliciting behaviour in another is that of the cuckoo.[103] This bird lays its eggs in the nests of other birds, such as the reed bunting. The larger cuckoo baby takes up most of the time and energy of the mother bunting, who attempts frantically to feed it as though it were her own offspring. This is a case of one creature taking advantage (unconsciously, of course) of the drive of the mother to take care of the young in her nest. The bright red throat and the loud calls of the cuckoo are thought to be the factors which allow this manipulator to 'inject its control'[104] into the bunting. Such trickery, or manipulated altruism, will continue in nature as long as the benefits to the manipulator outweigh the costs to the manipulated.[105]

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[103]Davies and Brooke (1991).
[104]R. Dawkins (1982), 227.
[105]Manipulated altruism is a favoured subject of Richard Dawkins in *The Extended Phenotype* (1982), 54-5, 67-70, 226-7, 233, 247. It is also discussed in M. Dawkins (1986), ch.3; Cronin (1991), 261-4.

3. THE NATURE OF BIOLOGICAL ALTRUISM

Although other models may explain other ways in which altruism could persist in nature, these three examples are the most commonly cited.[106] A simple and fundamental fact of evolutionary biology is that genetic information which is responsible for behaviours will tend not to survive if those behaviours are a net liability to that genetic information (this is the point of Dawkins's claim that genes are 'selfish'). The mistaken belief that this fact about *genetic information* can be equally well said about *the organism exhibiting the behaviour* has led to the so-called 'paradox of altruism'. On the contrary, the kin selection and manipulated altruism models show that although a specific piece of genetic information may flourish because of a certain behaviour, the particular organism performing the behaviour may suffer, or even die, as a result. Another mistaken belief that contributes to the notion of a 'paradox of altruism' is that the benefits which behaviours facilitate must be *immediate*. The reciprocal altruism model shows that when creatures act in a sufficiently close relationship with each other, benefits of behaviours can often come later in the future; and, the genetic information which specifies such behaviours will persist over the generations because of those delayed benefits.

The definition for 'altruism' as it has been discussed here is, again, behaviour of one organism that 'increase[s] another such entity's welfare at the expense of its own'.[107] A conventional dictionary definition of altruism, on the other hand, might read, 'unselfish regard for or devotion to the welfare of others'.[108] A crucial distinction between the two definitions

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[106]Another concept which might partially explain the persistence of altruism in nature is 'heterozygote superiority'. This controversial idea is described in Thompson, ed. (1995), 33-35.

[107]R. Dawkins (1989a), 4.

[108]*Webster's New Collegiate Dictionary*, 1980 ed.

reflects a distinction between the biological notion of 'altruism' and the concept as it is often used in ordinary language. This distinction is between *effect* and *intention*. The biological concept of 'altruism' refers solely to the effect of a certain kind of behaviour, regardless of any intentions. When a bee, reed bunting, vampire bat, olive baboon, or human exhibits behaviour that expends energy or puts itself at risk whilst at the same time aiding another creature, such conditions are both necessary and sufficient for calling such behaviour altruistic, and the organism an altruist, in the biological sense. A human *x*, for instance, pushes an innocent someone else *y* from the pavement onto the street, intending for *y* to be hit by a bus. In actuality this does not happen, but in the process *y* escapes a mad driver who careers down the pavement and collides with *x*. If altruism is defined only in terms of the effect, as it is in sociobiology, *x* is an altruist. Such 'effective altruism', however, clearly contrasts with the 'intentional altruism' of the conventional definition. Given *x*'s intentions, he could hardly be called 'devoted to the welfare of others'. 'Intentional altruism' requires devotion on the part of the individual to the cause of the welfare of others. Assuming that an intentional altruist could speak, he should be able to say with honesty 'I know that this action I am performing benefits someone else, and I am doing it for that reason'. Altruistic behaviour in this conventional sense might, in actuality, benefit oneself as well. However, in order to be altruistic, the *intention* behind the action must be that someone else be benefited, rather than oneself. An action is intentionally altruistic if the person performing it is doing so out of other-regard rather than self-regard.[109] Sociobiology deals not with this kind of altruism, but solely with effective altruism.

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[109]See Hepburn (1995) for this opposition of altruism to egoism. For other material on (intentional) altruism, see Schweitzer (1965) and T. Nagel (1970).

With this distinction, this overview of sociobiology and its dealings with altruism comes to a close. This introduction to the science was necessary in order to facilitate a proper understanding of a certain claim: that the material summarised above can serve as an empirical basis for a particular meta-ethical theory. That claim has been made and the theory most fully developed by the philosopher of science Michael Ruse. This theory will be described and criticised in the following sections.

C. Sociobiological Meta-ethics: Description

Ever since its publication, Darwin's *Origin of Species* has been seen by many to have considerable philosophical implications. One writer in the late nineteenth century believed that 'With the one exception of Newton's *Principia* no single book of empirical science has ever been of more importance to philosophy than this work of Darwin'.[110] In the end of the work Darwin himself vaguely spoke of 'open fields for far more important researches' regarding humans, but referred only to their origin, history, and psychology.[111] A dozen years later, he was more specific in his beliefs about the relationship between the new evolutionary biology and philosophical topics, especially regarding ethics. Working from his belief that humanity's 'moral sense is fundamentally identical with the social instincts' which in 'man and the lower animals have no doubt been developed by the same steps',[112] he briefly sketched an ethical theory he believed to be 'advisable' from the standpoint of evolution: 'to take as the test of morality, the general good or welfare of the community'.[113] His

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[110]Royce (1892), quoted in Flew (1984), 32.
[111]Darwin (1859), 458.
[112]Darwin (1871), 97-8.
[113]ibid., 98.

contemporary Herbert Spencer had a different idea; namely, that the principle of natural selection should be seen directly as an ethical as well as a biological principle, and so 'good conduct' is defined as 'more evolved conduct'.[114] In the one hundred years that followed, several other ideas have arisen as to ways in which evolutionary biology could be used to explain morality and moral principles. Julian Huxley believed that the morality of actions could be judged by their contribution to the progress of evolution in general.[115] C. H. Waddington sought moral guidelines more specifically in the process of human evolution.[116] All three of these-- Spencer, Huxley, and Waddington-- have been said to be refuted by the arguments provided by David Hume and G. E. Moore which were discussed in the last chapter.[117] Whether or not this suggestion is correct (for as has been shown,[118] Hume's and Moore's arguments have a specific scope), the most prominent evolutionary ethical theories today tend not to connect so directly the facts of the evolutionary process and the moral values we ascribe to things.[119] However, many of them do agree with Waddington's assertion that 'ethics is based on facts of the kind with which science deals'.[120] By the definition offered earlier,[121] if one accepts this statement then one is an ethical naturalist. If one claims this to be the case not analytically (by virtue of either logic or semantics), but rather as a matter of synthetic fact, then one is a synthetic naturalist.

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[114]Spencer (1879). See also (1892).
[115]J. Huxley (1953).
[116]Waddington (1960). These and other evolutionary ethical theories are reviewed in Hofstadter (1959); Russett (1976); Jones (1980); Richards (1987).
[117]See, e.g. Ayala (1987), 304-7. Certain contemporary arguments against their views have often been viewed as decisive as well. Against Spencer, there is T. Huxley (1894), esp. pp.46-86. Against Julian Huxley and C. H. Waddington there is G. Simpson (1949), and even more to the point, (1969); and Dobzhansky (1962); (1973).
[118]See ch.II.
[119]Probably the three most notable contemporary proponents of evolutionary ethics are: R. D. Alexander (1979); (1987); Robert J. Richards (1986); (1987); and Michael Ruse (1986); (1986a); (1989); (1991); (1995). Their prominence is described in such papers as Rottschaeffer and Martinsen (1990), 375-6; and Collier and Stingl (1993).
[120]Waddington (1942), 18.
[121]See Introduction, and I.A.

One contemporary philosopher of evolutionary biology, Michael Ruse, firmly stands in this synthetic naturalist camp, and has produced a meta-ethic which he claims to be based on the empirical findings of sociobiology.[122] These findings, however, do not only include the models for the evolution of biological or effective altruism presented in the last section, but also other claims which do the work of linking that information with the more meta-ethical premises on which Ruse builds his argument. This linkage was provided by the sociobiologist E. O. Wilson.

1. E. O. WILSON AND THE NEW GENEALOGY OF MORALS

The Preface to a recent collection of papers on evolutionary ethics says that 'Two watershed dates in this endeavor are 1859 and 1975'.[123] The first, being the publication date of Darwin's *Origin of Species*, is understandable given the efforts of those who were inspired by it and his later works to develop evolutionary theories of ethics. The second date marks the publication of Wilson's *Sociobiology: The New Synthesis*, which has directly contributed to its own legacy of evolutionary approaches to ethics only with very small portions of the first and last of its twenty-six chapters.

Wilson states his vision in the beginning of the book, in a now well-known passage:

> 'The biologist, who is concerned with questions of physiology and evolutionary history, realizes that self-knowledge is constrained and shaped by the emotional control centers in the hypothalamus and limbic system of the brain. These centers flood our consciousness with all the emotions-- hate, love, guilt, fear, and others-- that are consulted by ethical philosophers who wish to intuit the standards of good and evil. What, we are then compelled to

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[122]Ruse (1984); (1986); (1986a); (1991); (1995), ch.8; Ruse and Wilson (1986).
[123]Thompson, ed. (1995), ix.

> ask, made the hypothalamus and limbic system? They evolved by natural selection. That simple biological statement must be pursued to explain ethics and ethical philosophers, if not epistemology and epistemologists, at all depths.'[124]

This explanation, or as he later calls it, 'biologicization',[125] is described further in several places, such as various points in his treatise *On Human Nature*: 'Human emotional responses and the more general ethical practices based on them have been programmed to a substantial degree by natural selection over thousands of generations.'[126] This means that 'Morality has no other demonstrable ultimate function' than to be one of the many means 'by which human genetic material has been and will be kept intact'.[127] Any additional meaning or purpose to morality, unrelated to biological utility, is therefore misconceived. Furthermore, this adaptation is not to the environment of our own day. Rather, our moral decisions are choices on the basis of 'value systems... created in an evolutionary age now long vanished.' As a result, just as the realisation that religious beliefs are an idiosyncratic biological phenomenon means that 'scientists cannot in all honesty serve as priests',[128] the realisation that morality has a similar origin and purpose means that we have no reason to take seriously the moral pronouncements of the 'merely wise'.[129] Better ethical guidelines will come from a new belief system, which is different from those which have produced our conventional ethical norms: 'the mythology of scientific materialism'.[130]

Approaching ethics in the spirit of iconoclasm on the basis of the view that morality's origin and purpose is actually the fostering of one's own

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[124]Wilson (1975), 3.
[125]Wilson (1975), 562. His discussion of ethics continues to p.564.
[126]Wilson (1978), 6.
[127]ibid., 167.
[128]ibid., 193.
[129]ibid., 7.
[130]ibid., 209. This belief system is described on pp.196-209. His programme for the 'biologicization' of ethics is also discussed in (1980); (1980a); Lumsden and Wilson (1983), 175; Ruse and Wilson (1985); (1986).

interests is nothing new in moral philosophy. The Sophist Callicles, as Plato depicts him, claims conventional morality to be an invention of rulers to keep slaves under their control.[131] Friedrich Nietzsche, in his *Genealogy of Morals*, brings judgement on conventional morality because of its origins in feelings of resentment among the weaker elements of society.[132] Moreover, Nietzsche seems to presage sociobiology in his claim that since the instincts producing morality are actually 'a self-preservative measure... the cult of altruism is merely a particular form of egoism'.[133]

Wilson's proposal is importantly different from prior 'genealogies of morals', however. Neither Callicles nor Nietzsche were in a position to offer significant empirical evidence for their beliefs. Wilson, however, only arrived at his position on ethics after considering the scientific evidence for sociobiology and applying its conclusions to humanity, as seemed to him appropriate.[134] Wilson found his claims to have enough scientific warrant for him, with Michael Ruse, to state confidently that 'ours is an empirical position'.[135]

The precise connection between the facts of sociobiology described earlier and the ethical claims Wilson makes, can be gleaned from the flow of his arguments on the subject. In 'The Morality of the Gene', the telling title of the first chapter of *Sociobiology*, Wilson proceeds directly from discussing moral principles and their origin, to a discussion of the 'central theoretical problem of sociobiology', that of explaining (biological) altruism.[136] Likewise in *On Human Nature*, a discussion of courageous warriors in battle and other human actions which are claimed to be morally

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[131]Plato, *Gorgias*, 482-6.
[132]Nietzsche (1887).
[133]Nietzsche (1889), no.373.
[134]An autobiographical description of his attaining sociobiology and its human implications is Wilson (1994), ch.16-17.
[135]Ruse and Wilson (1986), 433.
[136]Wilson (1975), 3-5.

praiseworthy leads into an explanation of kin selection.[137] The transition occurs at a precise point in the discussion, in these two sentences:

> 'I doubt if any higher animal, such as an eagle or a lion, has ever deserved a Congressional Medal of Honor by the ennobling criteria used in our society. Yet minor altruism does occur frequently, in forms instantly understandable in human terms, and is bestowed not just on offspring but on other members of the species as well.'[138]

It is clear from this statement and others that Wilson is close to Darwin in this regard, believing that the morality of humans is fundamentally a growth from the altruistic behaviour of animals, and therefore can be explained fundamentally in the same terms as that altruistic behaviour.

Wilson's remarks on ethics have been criticised heavily from several directions. Some, whose political ideologies apparently contradict Wilson's claims, have argued on the basis of those ideologies.[139] This type of criticism will not be discussed here, on the assumption that in order for an allegedly empirical theory *t* to be called into question, either empirical evidence must be applied against *t*, or else it must be shown that the empirical evidence presented for *t* is either false or underdetermines the range of possible consistent theories. In and of themselves, neither the assertion of a political credo nor the demonstration that the credo is inconsistent with *t* does either of these things.[140]

Some sociologists have claimed that a cultural relativism rather than the belief in a uniform human morality is the empirically justified view.[141]

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[137]Wilson (1978), 149-153.
[138]ibid., 150.
[139]E.g. Lewontin and Levins (1976); Fisk (1984); Lewontin, Rose and Kamin (1984); Lewontin (1991); S. Gould defends their political objections in several places, e.g. (1978), ch.30, esp. pp.237-9; and (1988), ch.9.
[140]This is not meant to suggest that this is all that is attempted or accomplished by the works cited above. Rather, the point is that any arguments against a purportedly empirical theory on the basis of a political view will be ignored hereafter.
[141]E.g. Sahlins (1976). Lumsden and Wilson (1981) attempts to take into account cultural differences, admitting that 'sociobiology has not taken into proper account... the diversity of cultures' (p.ix).

This criticism will not be discussed here either, but not because this is an invalid area for debate.[142] Rather, the significance of cross-cultural universals follows from a working assumption accepted earlier for the sake of argument, that the genes are significant enough in the formation of human attitudes and behaviours for human sociobiology to be a legitimate discipline.[143]

Others in the years following Wilson's works cited flaws that more specifically relate to the articulation and defence of his view. Peter Singer criticised him for the absence of serious engagement with moral philosophy, and the vagueness and scarcity of his argumentation.[144] Roger Trigg argued that Wilson failed to support adequately his connection between animal altruism and human morality.[145] Philip Kitcher divided Wilson's project of 'biologicizing ethics' into four distinct claims, and accused him of equivocation among those claims and a lack of argument for the two most ambitious and controversial of them.[146] Rather than respond to these substantially philosophical arguments alone, Wilson worked with the philosopher Michael Ruse in such a way that at least some of the philosophical shortcomings noticed by the critics could be remedied by the latter's argumentation. After a short period of collaborative effort, Wilson turned to other projects[147] whilst Ruse developed the sociobiology-based meta-ethic in his own way in a series of papers and books.

2. MICHAEL RUSE'S NATURALISM

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[142]Notable in the debate over the significance of cross-cultural moral universals is Westermarck's classic (1906), and the opposing view held by Duncker (1939) and Asch (1952). A recent way into the discussion is the collection of papers in *The Monist* 78:1 (January 1995).

[143]See section B.1b.

[144]Singer (1981), ch.3.

[145]Trigg (1982).

[146]Kitcher (1985), 417-34. A more recent restatement is (1994).

[147]The fruits of the collaboration are Ruse and Wilson (1985); (1986). Since then Wilson has been best known for his work on biodiversity.

The central purpose of this chapter is to provide an example of a critique of a synthetically naturalistic ethical theory. Although logical and semantic forms of naturalism have been thoroughly criticised with such tools as the 'is-ought gap' and the 'naturalistic fallacy', synthetic naturalists do not claim their theories to be true analytically, that is by logic or the meanings of words, which is the type of justification those tools criticise. Therefore new tools, or at least old tools modified in important ways, need to be developed in order to assess the validity of synthetic naturalism.

In order for this chapter to be successful, then, Michael Ruse's meta-ethic must be shown to be a synthetically naturalistic theory. Ruse describes the naturalism to which he adheres in the beginning of his most recent book, *Evolutionary Naturalism*:

> 'For me, "naturalism" is something to do with nature, meaning the world of experience, and since the most powerfully successful approach that we have to this world-- the only true approach that we have towards real understanding-- is the method of science, I take a naturalist to be someone who would understand through the methods and results of science... Naturalism for me, therefore, means trying to understand through empirical law. This means that you have got to appeal to experience-- you cannot just think things through *a priori*-- and, without wanting to make this sound altogether too much like the Thirty-nine Articles, I believe that there are certain general rules which people have discovered and perfected to ensure that the understanding through law is as reliable and solid as is possible to fallible mortals, given the scope and limits of what is known at that time.'[148]

Among the 'general rules' of which he speaks, one of his personal favourites is

> 'the attempt to explain as much as possible by as little as possible, especially explanation involving the unification of two or more hitherto disparate areas of understanding

[148]Ruse (1995), 1-2.

> beneath one or a few high-level hypotheses or established laws.'[149]

His description of 'naturalism' accords with that used in this thesis; namely, that a particular realm of enquiry is properly understood as dealing only with principles, properties and terms that are accessible to science. Therefore Ruse is a naturalist in a broad philosophical sense. With respect to ethics, he is consistent in his naturalism:

> '...the philosopher as naturalist must move beyond the values inherent in science and turn to the broader question of moral and social values... Fortunately, thanks to recent advances in the science, we can now see that it is only by taking an evolutionary approach to human nature that we can hope to solve some of the most pressing questions of traditional ethics.'[150]

He goes on to provide detailed support for his 'evolutionary based ethics',[151] by which he means an ethics based on the science of evolutionary biology (especially sociobiology) as it has been presented in this chapter.[152] Therefore, he is a naturalist in the ethical sense in particular. That he is a *synthetic* naturalist, rather than a *logical* or *semantic*, is shown by his above rejection of the *a priori*, together with the absence in his work of any claim that moral terms can either be logically derived or defined in terms of nonmoral terms. In fact, he argues against this in several places.[153] His belief, rather, is that 'on the basis of factual theory about the nature and process of evolution, you can provide a total explanation of morality'.[154] In

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[149] ibid., 2.
[150] ibid., 9.
[151] ibid.
[152] ibid., Part III.
[153] Ruse (1986), 227-8; (1989), 254; (1991), 501; (1995), 230-1.
[154] Ruse (1986a), 256.

the words of Ruse and Wilson, 'The time has come to turn moral philosophy into an applied science'.[155]

3. RUSE'S DEFENCE OF ETHICAL SCEPTICISM[156]

Although the sociobiological approach to ethics was introduced in terms of E. O. Wilson, and although he worked with Ruse in the beginning stages of the latter's philosophical development of the position, there are important differences between their views. Among these are the degree to which our genes control our behaviour (Ruse claims to be less deterministic than Wilson[157]); the issue of whether evolution is progressive (Ruse being more opposed to this than Wilson[158]); and, perhaps most significantly, the question of whether ethical imperatives can be derived from our biological nature (Ruse answering in the negative and Wilson in the positive[159]). So, although Wilson has worked with Ruse on the support for the linkage between sociobiology and meta-ethics, Ruse's meta-ethic is his alone.

Ruse believes that an attention to morality and to the facts of sociobiology yields an 'error theory'. More specifically, an attention to sociobiological facts provides an explanation of why we believe what we do regarding morality, as well as a basis for the assertion that all of these beliefs are false.

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[155]Ruse and Wilson (1986), 421. Note: Although this does reveal synthetic naturalism, such a drastic claim is not required by synthetic naturalism; in fact, many synthetic naturalists believe that it is our best science *together with* our best moral philosophy that will produce a proper meta-ethic (e.g. Sturgeon (1988)). The requirement is that the moral philosophy not utilise any principles, properties or terms that cannot also be employed in science.

[156]After reading this section and the subsequent critical analysis, Prof. Ruse endorsed this description of his view as indeed his own, and suggested that he be quoted here as saying that 'almost uniquely you seem to have got my position right'. (3 September 1997).

[157]Ruse (1995), 158-9.

[158]ibid., ch.4 and pp.230-1; c.f. Wilson (1975), e.g. 379, 382.

[159]Ruse (1995), 229; c.f. Wilson (1980); (1984).

Morality, on Ruse's view, possesses certain distinguishing characteristics. First among them is the feeling of obligation, or a peculiar emotional draw towards certain things and away from other things. This can be called the prescriptivity of morality.[160] Second is an 'air of objectivity',[161] which for Ruse includes the senses that such prescription is universal, or applicable to anyone in a similar situation, and also that the foundations for these claims that are external to the will of the subject, or nonsubjective. These characterisations of morality are not unreasonable, and are regularly cited by meta-ethicists as aspects inherent in morality.[162] It is widely believed that an ethical theory which dispenses with any of these features is to that extent revisionist, and must provide an explanation for why we tend to think the contrary.[163]

Ruse believes that an attention to scientific facts as they are presented in sociobiology can yield an understanding of *why* such prescriptivity, universality and nonsubjectivity are a part of moral judgement, as well as a realisation that these features are actually misleading us. His argument proceeds as follows:

P1: Strategies for co-operative behaviours have evolved in certain creatures because of their adaptive value.

P2: Strategies for behaviours which have evolved because of their adaptive value must achieve behaviours.

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[160]Ruse (1984), 173-4; (1986), 227-30; (1986a), 221-2; (1989), 263-9; (1991), 502-3; (1995), 245; Ruse and Wilson (1986), 431-2.

[161]Ruse (1984), 190-2; (1986), 235-6; (1986a), 253; (1989), 268-9; (1991), 506-7; (1995), 241; Ruse and Wilson (1986), 431-2. Hereafter only one citation per point will be provided, although each of the most significant points may be found in most or all of these seven sources.

[162]Among those who have argued that one or more of these are inherent in moral judgement are: Moore (1922), ch.10; Prichard (1937), 94-5; Frankena (1973), 100; Mackie (1977), 35, 52; Hare (1981), ch.6; MacIntyre (1981), ch.2; Carson (1984), 26; Smith (1994a), 39-40; Blackburn (1984), 187-9; (1988); (1995).

[163]See II.D.3.

P3: A belief in moral (prescriptive, universal and nonsubjective) guidelines has evolved in humans because it achieves behaviours in line with the co-operative strategy.

P4: It is practically impossible, and at any rate irrelevant, for a belief in moral guidelines to have evolved because of its adaptive value, and at the same time for that belief to be true.

C: Moral guidelines are an (adaptive) illusion, and our belief in them false.

P1: Strategies for co-operative behaviours have evolved in certain creatures because of their adaptive value.

This premise may be called the 'sociobiological foundation', for it is precisely the conclusion of sociobiology. Support for this point has been described in the first half of this chapter, most notably in the work of G. C. Williams, W. D. Hamilton, Robert Trivers, E. O. Wilson, Richard Dawkins, and Robert Axelrod. Ruse argues that sociobiology is not a new paradigm, but is an integral part of Darwinism, and should be accepted together with the more long-standing elements such as natural selection itself.[164] He was convinced of the irrelevance of most criticisms of sociobiology long before he even thought that it was relevant to ethics;[165] and is generally confident that the success of the science will continue, although he states this claim with caution.[166]

Regarding the adaptive nature of co-operative behaviour, Ruse claims that

> 'Behaviour is a function of the genes as sorted by natural selection, and it succeeds and is preserved because it confers adaptive advantage on possessors... Human thought and behaviour-- particularly, human *social* thought and

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[164]Ruse (1987).
[165]Ruse (1979).
[166]Ruse (1989), ch.7.

> behaviour-- results from and must be related to biologically rooted adaptive advantage'.[167]

Therefore, Ruse is a thorough adaptationist. Also, he finds empirical successes in the sociobiology of culture in both directions: behaviours with adaptive value being translated into cultural values (e.g. incest taboos), and cultural values being translated into behaviours with adaptive value (e.g. traditions of paying for brides).[168] With regard to co-operation, he cites both kin selection and reciprocation as strategies which are adaptive and able to produce such behaviour.[169] This behaviour he labels 'altruism' (in quotes), which is a 'technical biological term, and does not necessarily imply conscious free giving and receiving'.[170]

P2: Strategies for behaviours which have evolved because of their adaptive value must achieve behaviours.

This is a noncontroversial transitional point. It presents the stipulation that if a behaviour is adaptive, then it is the behaviour which must be elicited in order for the genes specifying such behaviour to be 'naturally selected'. In genetic terms, it is the *phenotype*, or the actual exhibition of the trait specified by genetic information, which enables natural selection to operate. A strategy therefore must include some mechanism, or *vehicle*, by which to ensure that the behaviour will be produced.

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[167] ibid., 161.
[168] ibid., 172-86.
[169] Ruse and Wilson (1985); Ruse (1985a), 230-1.
[170] Ruse and Wilson (1986), 425.

P3: A belief in moral (prescriptive, universal and nonsubjective) guidelines has evolved in humans because it achieves behaviours in line with the co-operative strategy.

Ruse finds morality to be the fulfilment of the stipulation mentioned in P2 regarding humans. People are not 'unthinking genetic robots';[171] so there must be some type of mechanism other than rigid programming which could still ensure that we co-operated with others, but that would be more appropriate for 'conscious, reflective beings'[172] who 'seem to have a dimension of freedom, of flexibility'.[173] Moreover, it would be so time-consuming to have 'very efficient on-board computers' which make the perfectly adaptive decision every time a social situation arose, that the adaptive value of co-operation would surely be overridden by the adaptive disvalue of the time spent in deliberation. So there are good evolutionary reasons why 'we are not altruists like the ants, nor are we altruists like the mega-brains'.[174]

Genetic predisposition of behaviour in humans, on the other hand, is best described as a system of 'epigenetic rules',[175] where the genes specify a 'rough biological map'[176] of generally advantageous strategies, much as modern chess games employ.[177] In answer to the question of 'How does the cooperative strategy present itself to us in our consciousness?' Ruse answers:

> 'In a word, they are the rules of moral conduct! We think that we ought to do certain things and that we ought not to do other things, because this is our biology's way of making us break from our usual selfish or self-interested attitudes and to get on with the job of co-operating with others. In short,

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[171] ibid.
[172] ibid.
[173] Ruse (1995), 240.
[174] ibid.
[175] Ruse and Wilson (1986a), 143; see also Lumsden and Wilson (1981).
[176] Ruse and Wilson (1986), 427.
[177] Ruse (1995), 241. This is a type of 'evolutionarily stable strategy'; see Maynard Smith (1972); (1982); Parker (1984); R. Dawkins (1989), 69-87.

> what I am arguing is that in order to make us "altruists" in the metaphorical biological sense, biology has made us altruistic in the literal, moral sense.'[178]

In support, Ruse cites ethological literature regarding chimpanzees, which display a 'quasi-morality' which seems to be a transitional form between the nonmoral 'altruism' of lower animals and the genuinely moral altruism of humans.[179]

The distinguishing features of morality aid in ensuring that we follow our moral feelings, for if we did not have them we would probably ignore moral guidelines when they went against our selfish desires. 'But because they give the illusion of objectivity to morality, they lift us above immediate wants to actions which (unknown to us) ultimately serve our genetic best interests'.[180] More explicitly,

> 'Unless we think morality is objectively true-- a function of something outside of and higher than ourselves-- it would not work. If I think I should help you when and only when I want to, I shall probably help you relatively infrequently. But, because I think I *ought* to help you-- because I have no choice about my obligation, it being imposed upon me-- I am much more likely, in fact, to help you... Hence, by its very nature, ethics is and has to be something which is, apparently, objective'.[181]

Therefore, 'morality, or more strictly our belief in morality, is merely an adaptation put in place to further our reproductive ends'.[182] In Ruse's words again:

> 'We survive and reproduce more efficiently with it than we do without it. In the past, those people who lacked a sense of morality, simply tended to be ostracized and at a disadvantage. So they failed to survive and reproduce as efficiently as those with a sense of morality.'[183]

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[178]Ruse (1995), 241.
[179]De Waal (1982); Goodall (1986).
[180]Ruse and Wilson (1986), 427.
[181]Ruse (1989), 268-9.
[182]Ruse and Wilson (1985), 52.
[183]Ruse (1985a), 231.

This follows from the nature of reciprocal altruism, where one who does not reciprocate is 'grudged' by other reciprocators once they realise that he doesn't 'scratch other's backs'.

None of this implies that morality operates perfectly, for it does not. For one thing, differing religious beliefs as well as other factors have resulted in the fact that 'people in different societies have taken different things to be right and wrong'.[184] Secondly, 'We can certainly do immoral things. We do them all the time.'[185] Morality works despite these imperfections, which are bound to be common in such a 'quick and dirty solution'[186] which avoids the difficulties of either rigid determination or time-consuming perfection.

P4: It is practically impossible, and at any rate irrelevant, for a belief in moral guidelines to have evolved because of its adaptive value, and at the same time for that belief to be true.

If we believe moral guidelines to be true simply because believing this allows us more successfully to survive and reproduce (or, more precisely, because believing this allowed our ancestors to do so), it seems impossible, and anyway irrelevant, for one to make the assertion that moral guidelines really do exist and that we *really ought* to do things that we *have evolved to think we ought* to do. Therefore, we can explain the causes of our moral beliefs, but cannot justify them.[187] There are separate arguments for the impossibility and the irrelevance respectively.

First, evolution does not operate in such a way that particular outcomes are necessary; rather, it 'works in a gerry-building fashion, making do with what it has at hand',[188] and different results would occur if

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[184] ibid., 233.
[185] Ruse (1986), 236.
[186] Ruse (1995), 241.
[187] Ruse (1984), 185-94; (1986a), 256-8.
[188] Ruse (1995), 168.

the history of life were to repeat itself. Progress in evolution of the sort that involves predetermined goals such as human existence and knowledge of moral principles 'is impossible in the world of Darwinism, simply because everything is relativized in the sense that success is the only thing that counts'.[189] However, in believing what our biology attempts to convince us-- that prescriptive, universal, and nonsubjective moral guidelines obtain-- we would be believing that these guidelines have some sort of currency which is independent of our idiosyncratic evolutionary history. On the contrary, the evidence of sociobiology shows us that these guidelines, far from transcending our biology, are actually *the result of our evolving the way we did.* Morality is wholly contingent upon the undirected path of our evolutionary history. An attempt to defend or assert the truth of the claims morality makes upon us thus amounts to a misunderstanding of what morality is all about. This is the basis for the claim that 'the recognition of morality as merely a biological adaptation shows' that 'morality is just an aid to survival and reproduction, and has no being beyond or without this'.[190] Again, 'it is precisely because morality is not necessary and it could have been other than it is-- we might have had no morality at all-- that I want to argue that, in the end, it is all a collective illusion of the genes'.[191] In this sense our minds, fashioned by evolution, have deceived us because such a deception benefits our survival.

Second, even if moral guidelines could actually obtain and have some validity over and above our idiosyncratic, 'might-have-happened-otherwise' biological constitution, the truth of moral claims would be completely irrelevant, 'which is surely a contradiction in terms'.[192] This can be illustrated by a thought experiment:

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[189]ibid., 178.
[190]Ruse (1989), 268.
[191]Ruse (1995), 268.
[192]Ruse (1991), 507.

> 'Consider two separate worlds, identical except one has an objective morality and the other does not. Humans could have evolved in both worlds, to believe in exactly the same things! The two identical species could share thoughts about right and wrong. To suppose otherwise, that is, to suppose that only the world of objective morality could have humans believing in it, is to suppose an extra-scientific channelling of events-- a channelling which is quite antithetical to modern evolutionism. In short, therefore, in a sense, the objective morality is redundant. Its existence is irrelevant to human thought and action.'[193]

A belief in prescriptive, universal, nonsubjective principles has arisen by biological means, i.e. irrespective of whether any such principles really obtained. It therefore makes no difference whether they do obtain, because we think this way nevertheless. Both worlds, the one with and the one without actual moral principles, are populated by people who are programmed to think a certain way about morality. What the truth of the matter is does not matter, because evolution has created an illusion in our minds and that is all we can know on the subject.

Ruse counters what is probably the immediate objection to this argument, that according to this line of thinking all of our evolved capacities which purport to relate to something objective and actual would be deceiving us in the same way as our capacity to understand moral guidelines. Attempting the same thought experiment above with some other evolved capacities does not yield the same conclusions, however, which shows that those other capacities are not illusory as our moral one is. Imagine two worlds, identical except that there are no predators in one. Would people in both worlds have evolved in such a way that they perceive predators in order to avoid them, if in one of the worlds they do not exist? In the world with predators, it is sensible that people would have evolved to perceive them, for this benefits survival immensely. In the world without

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[193]Ruse (1989), 268-9.

predators, however, there is no survival value gained by a person perceiving predators when they do not exist, and so there is no reason to believe that any genes for such an illusion-mongering capacity would ever evolve. Therefore, although 'our eyes are no less an adaptation than is our normative ethics',[194] healthy eyes are generally to be believed because there is no adaptive value in their informing us of things that do not really exist, whilst there is good adaptive value in their informing us of things that do in fact exist. On the other hand, our capacity to understand moral guidelines is not to be believed because there is good adaptive value in its informing us of morality regardless of whether that information is true-- 'We need it for "altruism"'.[195]

D. Sociobiological Meta-ethics: Critique

A synthetically naturalistic theory of meta-ethics can be criticised from two different perspectives. First, since science is said to do the work of justifying the principles, properties and terms involved in such a theory, a critic can focus on the allegedly scientific claims and assess the merits of these as such. Certain assumptions necessary to sociobiology will not be criticised here, as was stated in the description of that science; but several other aspects of Ruse's claims will be criticised from the perspective of science or philosophy of science. Second, since it is moral philosophy with which a synthetically naturalistic theory deals, such a theory is susceptible to criticism from that perspective as well. Such criticism, informed by the work of the last two chapters, will also be offered here. Moreover, results of an appraisal of this one synthetically naturalistic theory may be to some

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[194]Ruse (1995), 250.
[195]ibid., 251.

extent generalisable; and if so, it could contribute to an understanding of whether synthetic naturalism, and even ethical naturalism in general, is an appropriate framework within which to develop an ethical theory.

1. ARGUMENTS FROM THE PERSPECTIVE OF SCIENCE

a. *The nature of the empirical*

After several statements, one of which is that humans are 'deceived by their genes into thinking that there is a disinterested objective morality binding upon them', Ruse and Wilson write (in a paper entitled 'Moral Philosophy as Applied Science') that 'Such are the empirical claims'.[196] Several other times in the paper they assert the nature of their position as empirical.[197] Ruse defines 'empirical' elsewhere as regarding 'the experiences we have of the world about us'.[198] He admits that empirical matters require evidence, and so there is a very good possibility that we may not have enough evidence to settle an empirical matter at any given time. Examples Ruse presents of matters which are not empirically settled are whether the 'epigenetic rules' which govern our behaviour can change in only a few generations, and whether natural selection can occur at the level of the group.[199] These for Ruse are empirical matters which are not yet decided. On the other hand, the illusory nature of objective moral guidelines is an empirical matter which *is*, or is nearly, decided, as is repeatedly claimed in his paper with Wilson. Presumably, then, sufficient experiential evidence has not been established for rapid genetic change or for group selection, but has been established regarding the nature of morality.

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[196] Ruse and Wilson (1986), 425-6.
[197] ibid., 422, 426, 430, 433.
[198] Ruse (1985), 200.
[199] Ruse (1995), 159; (1980), 34.

The empirical evidence for the illusory nature of moral guidelines should therefore be more significant than that for either of the other two issues. Ruse claims as empirical support the fact that chimpanzees exhibit behaviour which might be interpreted as 'quasi-morality'.[200] This piece of evidence is doubtful in its utility, as its relevance for morality depends on the very strict continuity of biological altruism and morality, which is the point to be proven. With respect to *morality*, as opposed to biological altruism, the several defences of his view do not contain any empirical evidence at all, but philosophical description of the particular relationship he believes to exist between altruism and morality, and the mutual exclusivity of contingency and objectivity regarding morality.[201] The case is put forth with thought experiments regarding parallel worlds and other argumentative devices that are designed not to provide evidence, but to aid one in grasping the central claim and to persuade one of its plausibility. The proposition that morality is merely a vehicle for biological altruism may be very reasonable, and not inconsistent with known facts of evolutionary biology; it may strike many people as an attractive possibility and be capable of strong philosophical support. However, for one who claims to gain understanding only 'through empirical law',[202] this cannot be an acceptable ending point, but only a starting point-- a hypothesis to be tested.

In objection, one might ask what kind of empirical evidence is possible in support for the claim that morality is nothing more than a vehicle for effective altruism. It might seem that no matter what evidence is given, someone will be able to object that a question has been begged. In answer to this objection, one need simply agree that this very well might be the case, but it does not decrease the validity of those objections at all. Of course, one can imagine evidence that directly relates to morality in some

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[200]Ruse (1995), 241.
[201]These arguments are taken up in the following subsections.
[202]ibid., 2.

way, such as the adaptive nature of moral taboos against incest; but this type of evidence only supports the conclusion that morality makes a contribution to the preservation of our gene pool. It shows that at least some of the things we regard as *good*, are also *good for us* in some sense. Such evidence does not at all support the claim that moral guidelines are *nothing more* than the contribution they make to our preservation. Plato, who is taken by Ruse to be a prime example of a philosopher who erroneously believes in the reality of moral guidelines,[203] would nevertheless have embraced evidence that moral guidelines help us more successfully reproduce, believing as he did that the just man is more healthy, successful, and fulfilled than the unjust.[204] So it seems that empirical evidence for morality's being adaptive, if found, would not be evidence for its illusory nature, but only contributes to such a view from a certain perspective of morality, which itself requires empirical evidence if it is to be claimed as empirical fact. Perhaps empirical evidence could be imagined which would contribute to Ruse's claim; but it may also be possible that there is no empirical evidence at all which could establish such a conclusion. If this is true, this would hardly lend support to the empiricist. Rather, it would seem to suggest that the hypothesis is empirically untestable-- that the nature of morality is not strictly an empirical matter. Arguments concerning it may require a significant degree of philosophical penetration beyond the information that is provided by experience. In fact, this extra-empirical discussion is precisely how Ruse defends his point. As this is the case, it can only be misleading to assert that something is an empirical claim when it is not being supported by any empirical evidence. Moreover, since Ruse's naturalism is defined in terms of his commitment to empirical law, doubts as

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[203]Ruse (1985a), 229.
[204]This is a central theme of the *Republic*; see especially Bk.IX.

to the empirical nature of his claims raise doubts as to whether he is being consistent when he makes them.[205]

Perhaps more important than whether Ruse's claims are empirical, is whether they are true. P1 of his argument is its foundation in sociobiology, including the models for effective altruism which were described earlier.[206] Since the assumptions necessary to the practice of sociobiology, including that of humans, have been accepted for the sake of argument, this premise will not be challenged. P2 depends only on the way in which natural selection operates, as has also been described earlier;[207] so this premise will not be challenged either. Just as crucial to Ruse's argument, however, are P3 (the claim that morality is a vehicle for biological altruism) and P4 (the claim that moral guidelines cannot be both contingent on the evolutionary process and objectively true). These two premises will be dealt with here, first from the perspective of the science.

b. *From 'altruism' to altruism*

The claim of P3 depends on a particular connection between biological, effective altruism, and genuine, intentional altruism. The former was defined earlier as 'behaviour of one organism that increases another's welfare at the expense of its own', and the latter as 'unselfish regard for or devotion to the welfare of others'.[208] The former is rooted in the effect of the behaviour, whereas the latter is rooted in the intention. Ruse's contention is that the latter arose as a vehicle for the former: that 'in order to make us "altruists" in the metaphorical biological sense, biology has made

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[205]Again, a synthetic naturalist *need* not make such strong claims. Ruse goes beyond the definition of synthetic naturalism in his declaration of adherence to empirical law and nothing more.
[206]Section B.2.
[207]Section A.
[208]Section B.3.

us altruistic in the literal, moral sense'.[209] Furthermore, in order to make us altruists 'in the literal, moral sense', Ruse suggests that guidelines have been manufactured in our minds, guidelines which appear to us to be universal, nonsubjective, and prescribing of certain actions. So, Ruse suggests that effective altruism is the adaptive trait; and that in order to produce this, intentional altruism has evolved; and that the means of producing this is a psychological illusion of objective guidelines.

Aside from the particular nature of our moral beliefs and their relations to intentional altruism, which will be discussed later from the perspective of moral philosophy, the connection made here between the concepts of effective and intentional altruism is worth investigating in its own right. In order for this connection to be made, it cannot be enough to show that *effective altruism* is adaptive to a greater extent than no altruism at all. This may very well be established by current sociobiological theory. In order for Ruse's claim to be considerable as a scientific possibility, *intentional altruism*-- and specifically, a disposition to intentional altruism which comes out of an illusory belief in its universality, prescriptivity and nonsubjectivity-- must be adaptive, as well as biologically possible. This stipulation presents problems at two points. The first is the connection between effective altruism and intentional altruism, and the second is at the connection between intentional altruism and illusory objective guidelines. The former will be discussed here, and the latter in the next subsection.

In order for the first connection to work in the way Ruse suggests, behaviour consistent with effective altruism must be similar enough to that consistent with intentional altruism, that the latter can be an effective vehicle for the former. Any differences in effect may compromise adaptivity. Given the definitions of the two types of altruism, therefore, it is a valid question whether a concept defined in terms of effect and another defined in

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[209] Ruse (1995), 241.

terms of intention could, by some means, be sufficiently equivalent in their results. The answer to this question depends primarily on the *effects of intentional altruism*. If intentional altruism most often brings about effects congruent with the effective altruism predicted by the sociobiological models, then the connection Ruse proposes is strong. Otherwise, it is weak, to the extent that there are effects of intentional altruism which run neutral or even counter to the survival of the genes.

As was described earlier when these terms were defined, it is easily possible for the two types of altruism to go in different directions.[210] The same behaviour was shown there to be both effectively altruistic and directly contrary to intentional altruism. Likewise, a behaviour can be intentionally altruistic but, through no fault of the altruist's, fail to produce the effect which was intended. Ruse, in claiming intentional altruism to be the vehicle for effective altruism, is depending on the effects being intended by the agents, and on agents being successful in effecting their intentions. Perhaps, all contrary examples aside, in actuality the majority of effects are intended, and the majority of intentions do reach fruition. Even if this is the case, a more significant problem remains.

One of the fundamental points underlying Darwinian evolution is the fact that not every organism born can survive to reproduce.[211] This fact means that competition must be a significant part of the natural order. This has become even clearer upon realisation of the role which genes play in natural selection, because each individual in a sexually reproducing species, barring identical multiple births, carries a different genome. This competition, driven by the fact of limited resources, necessitates that the persistence of the genes in one individual depends, if indirectly, on the demise of others. The models of effective altruism that have been described

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[210] In section B.3 there is an example of a person pushing someone else out of a position of danger into safety, but intending to do the opposite.

[211] Section A.2.

have arisen within this framework. They have arisen either because co-operation benefits shared genes (kin altruism), because co-operation benefits one's genes in the future (reciprocal altruism), or because one's genes benefit at the expense of another's welfare (manipulated altruism). Ruse does not talk much about the third category, but there is no biological reason why he should not-- parasitism is just as effectively altruistic as the other models. Regardless, based on current empirical evidence, co-operation must fit into one of these models in order to be considered adaptive to a sociobiologist, such as Ruse. These are very specific, although also very common, situations, which in no way contradict the inevitability and significance of competition in nature. Effective altruism, therefore, has definite biological limits, within which it works according to the interests of one's genes.[212] Outside of these limits, effective altruism runs contrary to these interests, and is therefore anti-adaptive, or 'maladaptive'. The sociobiological models Ruse invokes cannot explain how such behaviour could ever arise in nature.

If *intentional* altruism is expected not to be extremely maladaptive, it cannot operate without bounds that are very much like the bounds to effective altruism. Otherwise, it would obviously be acting in ways detrimental to the probability of their genes' survival. Kin aside, organisms are individuals with evolutionarily significant genetic differences, and co-operative behaviours which do not benefit themselves are likely to be harmful. Even seemingly small disadvantages, such as the time and energy wasted in helping others, could result in a net liability to organisms bearing that genetic information, especially in a primitive situation. The question,

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[212]That x is in the genes' 'interests' should be taken to mean merely that x is a trait which, if one's genes prescribe it, conveys an increase in probability that the relevant gene(s) will survive through the generations. If y is contrary to the genes' 'interests', then y is a trait which, if one's genes prescribe it, conveys a decrease in probability of survival of the relevant gene(s). As with all metaphorical language with respect to genes, it is merely an *effective* 'interest', rather than an intentional interest, which is meant here.

then, is whether we find intentional altruism in humans to have the strict bounds that must exist in order for it to have arisen as a vehicle for an adaptive trait.

Undoubtedly altruism towards family members is very common,[213] as predicted by kin selection. Likewise, we are often altruistic to others in a community setting[214] (recall that reciprocal altruism depends on the capacity to recognise and remember altruists and cheats). Perhaps we also submit to others' manipulation of us when the benefits to others of our doing so outweigh the costs to us, as would be predicted by the manipulated altruism model. As far as the present empirical evidence is concerned, this should be the extent of intentional altruism.[215] In fact, however, this is only the beginning of the altruistic behaviour found in humans. Many people believe, and at least sometimes act as though they believe, that other human beings, whether in this community or in others, are no less deserving of resources than we are; and yet it is the competition for resources which drives much of evolutionary change. People give large amounts of money to organisations dedicated to the aid of destitute foreigners and even nonhumans, cases which reciprocal altruism could not possibly sanction. Intentional altruism, by definition, is a devotion to the welfare of others. The concept places no bounds on this devotion. Peter Singer is not alone in his belief that 'Taking an objective point of view involves seeing our own interests as no more important than the like interests of anyone else. This yields the principle of equal consideration of the interests of all.'[216] Such an attitude, and even more significantly any behaviours which may result from it, far from being a vehicle for an adaptive trait, works in direct

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[213]Singer (1981), ch.2.
[214]ibid.
[215]Recall that the type of group selection which sociobiologists accept (see section B.2b) merely tends to reinforce reciprocal altruism in communities, and would not produce altruistic behaviour of a different sort than those already mentioned.
[216]Singer (1981), 151.

opposition to anything that could be considered one's genetic best interest. Arguably, few people if any actually live in such a way that others receive just as much attention from them as they give themselves. However, the very existence of intentional altruism which goes beyond the boundaries of genetic self-interest in its effects, is by itself empirical evidence against the idea that intentional altruism is nothing more than a vehicle for effective altruism. Perhaps some other models will someday be revealed to explain intentional altruism further; but as Ruse claims his theory to be an empirical one, he cannot claim that the evidence, as it is now, is completely in his favour on this point. Intentional altruism by definition, and at least to some extent in practice, recognises no definite boundaries of kinship or community.

c. *Achieving altruism: the adaptive value of illusory objective guidelines*

In order for Ruse's claim to be true, not only must intentional altruism be restricted in general to the production of effective altruism, but also the physiological/psychological means by which Ruse suggests intentional altruism to be promoted must be able to do the task efficiently. Whilst it is false to suppose that existing traits are the most efficient ones possible,[217] it is also false to suppose that a less efficient vehicle would arise to replace a more efficient one, all things considered. Furthermore, it is reasonable to suppose that if a vehicle has been found to be effective in the promotion of several behaviours, natural selection may tend to favour its effectiveness in promoting another behaviour as well. Another reasonable supposition is that an untried, more complex and intricate path would be less likely to be 'stumbled upon' by natural selection than a relatively simple adaptation that was equally effective. These suppositions cannot be taken as necessarily true in all cases, but they are reasonable points of departure for

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[217] S. Gould and Lewontin (1979).

an enquiry into the adaptive value of a trait. If Ruse is right, intentional altruism should have some adaptive advantage over more primitive vehicles for effective altruism, and it would likely have adaptive advantage over vehicles which have been found or supposed to operate for other behaviours. If no adaptive advantage is found for Ruse's particular model of intentional altruism over these others, there would have been no conceivable reason why the new, complicatedly objectified morality would ever have evolved to replace other vehicles.

i. Comparison with alternatives

Ruse claims (see the beginning of the description of P3) that the vehicle he proposes for effective altruism-- rules of moral conduct-- is more adaptive than two other possible vehicles: rigid mechanical determination, and an involved cost-benefit analysis for every encountered situation. Granted, for the reasons Ruse provides, these two alternatives would not be as adaptive for a human. Despite Ruse's confident conclusion from this, there seems no reason to believe that there is only one possible alternative to these two extreme views. In fact, there are at least two forks in the path from a rejection of these extremes to the concept of rules of moral conduct, each of which provides a range of alternatives. Moreover, these alternatives are not just speculations, as are Ruse's ideas both of the 'mega-brain' and the illusion of objectivity; rather, they are actual vehicles, used in nature today to promote all sorts of behaviours.

The first fork is at the level of the evolutionarily stable strategy. Since John Maynard Smith began testing this idea in the early 1970's, a great amount of work has been done in elucidating strategies for behaviour, many of which fall under neither the rigid determination category nor the mega-brain category.[218] This work, which has been said to have enjoyed

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[218]Early work is Maynard Smith (1972); (1974); (1976). This and other work is

'enormous success' and is called a 'trend in modern evolutionary theory',[219] provides a mass of alternatives to either extreme. As Richard Dawkins writes, 'A "strategy" is a pre-programmed behavioural policy... An evolutionarily stable strategy or ESS is defined as a strategy which, if most members of a population adopt it, cannot be bettered by an alternative strategy'.[220] When Ruse provides the example of a computerised chess game to support his vehicle, he is in effect describing the principle underlying the ESS: that a policy of when and when not to behave in a certain way, as distinct from a particular behaviour itself, can evolve. 'There could be, say, a set of decisions on when to escalate a fight and when to give up and slink away.'[221] Thus, in order to make us effectively altruistic, certain policies could have developed in the proto-human psyche which predisposed them in one of a number of ways. A decision to be altruistic could operate in the same way, for instance, as a squirrel's decision as to when and for how long it is worthwhile to risk predation in order to forage for food, or as a wolf's decision that further conflict with the alpha male is disadvantageous.[222] In other words, strategies can be very flexible, and they need not be entirely new and speculative in order to avoid the maladaptive extremes which Ruse presents as the only alternatives to his view.

The second fork at which many other alternative paths are available besides the illusory objectification of morality is that of the 'epigenetic rules' which E. O. Wilson postulates to be important elements in culture.[223] Ruse

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summarised in (1982). Later work is R. Dawkins (1980); (1982); Parker (1984); Maynard Smith (1988). Summaries are given in R. Dawkins (1989), ch.5; Cronin (1991), ch.3.

[219]Cronin (1991), 70-78.

[220]R. Dawkins (1989), 69.

[221]Cronin (1991), 71.

[222]'Decision' should be taken loosely in this sentence, as the possibility of a certain flexibility of behaviour when a creature is faced with a range of alternatives, governed by the dictates imposed by the stable strategy. No intention is necessarily involved (such strategies are described in relation to scorpions, for example), although it can be.

[223]Lumsden and Wilson (1981); (1983).

endorses these, which he and Wilson describe as 'genetically based processes of development that predispose the individual to adopt one or a few forms of behaviours as opposed to others'.[224] Although these may be considered as a subset of the evolutionarily stable strategy, Wilson most specifically identifies epigenetic rules with humans, and they involve thought, reflection, and in many cases communication and consensus in a population.[225] The study of these rules in a behavioural context is a fledgling science,[226] but there already are many areas in which Wilson and others have found these types of rules to be operative. Examples he provides are

> 'the peculiarities of color vision, phoneme formation, odor perception, preferred visual designs, and facial expressions used to denote emotions. All are diagnostic of the human species, all part of what must reasonably be called human nature.'[227]

None of these are claimed to have produced the sort of psychogenic illusions which Ruse and Wilson suspect our nature to have produced in order to achieve effective altruism. Perhaps we all recognise yellow as a single (indeed, primary) colour, whereas yellowish-green is regarded as in some sense a mixture or transitional colour. Perhaps such a recognition has a genetic basis. But, in order for such recognition, we (or at least most of us) have not had to imagine that there is an objective principle of yellowness which in some way is existent whereas the principle of yellowish-greenness is only derivative from it; much less have we been mesmerised that there is a universal prescription which we all should obey, to believe that yellow is a distinct colour. Phobias, another area of much work in epigenetic rules, are not perpetuated in humans by the manufacture of substantive psychological

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[224]Ruse and Wilson (1986), 426.
[225]ibid., 426-8.
[226]ibid., 428.
[227]Wilson (1994), 352.

illusions that spiders, heights, or tight spaces are actually something that they are not. Even the most crippled arachnophobe, who is far from the norm, can agree with the world's leading expert on the structure and physiology of spiders. He just has an uncontrollable and irrational fear of them. There seems no reason to suppose, then, that at the level of the epigenetic rule there is only one way in which our genes could consistently achieve a behaviour such as effective altruism. It is not necessary to postulate a radically new, scientifically unprecedented type of mechanism to assure that effective altruism is achieved in a population of humans.

Any number of evolutionarily stable strategies could have been developed other than the conscious, distinctively cultural epigenetic rules which Wilson claims to operate in our minds in the production of behaviours. Or, if epigenetic rules are the way nature did go with regard to effective altruism, there are many options at this level also which could have achieved effective altruism just as well as the production of illusory guidelines has been supposed to do. Nonhuman animals still care for their young, show restraint in fighting, give warning calls, protect each other, remove parasites from each other's heads, and share food. Why we should have to possess a radically different mechanism from these other mammals in order to achieve results of the same general type, requires some explanation beyond a simple contrast of epigenetic rules to the rigid programming of particular behaviours.

If illusory objective guidelines are claimed to have been needed in order to achieve altruism because of the unique complexity and flexibility of humans, this does not by itself provide anything in the way of explanation. A human can be hungry, tired, angry, in love, jealous, impatient, afraid, hurting, desirous, or faced with any number of other situations characterised by the necessity to make a decision and exhibit some type of behaviour. As Ruse says, our genes do not operate in either the rigidly robotic nor the

mega-brain manner to settle these matters. But, neither are we burdened with any illusions with regard to them. Feeding is obviously adaptive, and vehicles (hunger, set eating times) are in place to assure such behaviour in humans, although this behaviour can be and often is overridden by the individual. Vehicles are in place in humans for many other adaptive behaviours as well, such as mating. These may or may not be governed by what Wilson calls 'epigenetic rules', but we certainly do not find ourselves subjected in these cases to the extraordinary illusion-mongering mechanism which is said by Ruse to assure altruistic behaviour.

Furthermore, one cannot say (as Ruse has[228]) that it is the peculiarly non-self-regarding nature of altruism which makes moral guidelines the only workable vehicle. This confuses effective and intentional altruism. A person need not even *know* that an act is or is not beneficial to oneself, in order to be predisposed to do it. In fact, in many cases we are disposed to do things which we may very well know could actually jeopardise our personal welfare more than aid it; i.e., some instances of violence. If the sociobiologist's thesis regarding the genetic basis for aggression is accepted for the sake of argument, one may point out many instances where aggression in a particular circumstance is against my *personal* best interest, as opposed to that of my genes. Small-scale fights over trivial matters is a prime example. Our genetic constitution might predispose us to aggression in such cases because it is an evolutionarily stable strategy, and we may never stop to think that appeasing our (or someone else's) angry desires in this instance may not be in any particular person's best interest as an individual. For another example, caring for my young may not be in *my* best interest as an individual, but I do it anyway, even realising that fact, and so do nonhuman creatures without morality. The reason for this is that my intellectual knowledge of what is and is not in my personal interest does not

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[228]Ruse (1990), 65.

necessarily govern my actions. I may do many things, and *not for moral reasons*, which I know not to be in my interest as an individual organism. In fact, in many of these cases, possibly including both war and the raising of children, it is misleading to characterise our thoughts on the matter as being in any way individualistic, not to mention strictly selfish. One regularly hears of *esprit de corps* in battle, and also of family devotion, and few would claim that such instances are always, or even often, results of a recognition of objective moral guidelines. These examples, and indeed the very foundations of sociobiology, suggest that it is relatively unimportant whether creatures realise something to be in their *individual* interests or not. Their biology never has difficulty in predisposing them to behave in other ways; especially, those ways which are consistent with their *genes'* interests.

Confusion on this matter could stem from the fact that *intentional* altruism is to some extent distinctive because of its requirement that we be intentionally other-regarding; but whether we are intentionally altruistic is irrelevant from the perspective of the gene. As far as the genes are concerned, *effective* altruism is the object. Effective altruism can be achieved by the same mechanisms as any other genetically predisposed behaviour is achieved. Whether we know, or care, whether it is in our best interests is nowhere near an insuperable obstacle to genetic predisposition. Although Ruse shows in several places a recognition of the difference between effective and intentional altruism, at this point in his defence he regularly blurs the distinction. For example, he claims that 'Struggle and selection obviously incline one towards selfishness', and so in order to perform actions in the interests of some other individual 'we need an extra push... obligation'.[229] This confuses effective and intentional types of selfishness. Struggle and selection undoubtedly maximise effective

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[229]Ruse (1990), 65.

'selfishness', in the sense that most of our actions happen to benefit ourselves. This is understandable, given the fact that our interests often coincide with the 'interests' of the genes within us, and sociobiology predicts that we tend to do what is in the interests of our genetic information. However, there is no substantiation, and much evidence to the contrary, that such genetically-based, effective 'selfishness' should be translated into the type of *intentional* selfishness which Ruse claims us to have to overcome in order to produce *effectively* altruistic behaviour. Intentional selfishness, if defined in terms of our beliefs about what is in our personal best interest, is often overridden by other factors, as in violence and the raising of children. If, on the other hand, intentional selfishness is defined in terms of whatever desires we happen to have, then it is clear that we can have desires not only in accord with our personal best interest, but also against it, as these cases suggest. In some cases (though not all-- take drug abuse, for example) these desires are in our *genetic* best interest, and on this level effective altruism is just as 'selfish' as any other behaviour. No radically new, inordinately complex or otherwise extraordinary mechanism is necessary to prescribe such a behaviour relative to others.

To sum up, some type of vehicle or mechanism is necessary in order to achieve behaviours which are effectively altruistic. But, we need such mechanisms in any case of behavioural predisposition. Effective altruism is in no special place in this respect, and has no unique requirements to be achieved. We need to be altruistic in the same sense as we need to raise our children, to eat, to assert our position in relevant hierarchies, to defend our community, and to do many other things. Insofar as we are disposed to do these things by our genes, we are disposed regardless of whether they do our individual person any benefit, and so effective altruism places no unique requirements on our biology in order to be achieved. Furthermore, there are at least two levels, one common to all animal life and one common to all

human behaviour, on which mechanisms exist for behavioural predisposition. These satisfy the conditions Ruse presents for predisposition in humans just as well as he supposes his own idea to do. In fact, they may be said to be more likely as vehicles than Ruse's idea of illusory objective guidelines.. In addition to being actually operative in nature rather than purely speculative, they are much simpler. Also, they do not present a radically different solution to what is in fact a very common type of requirement in nature, in humans as well as in other organisms: the requirement that an organism exhibit certain behaviours in certain circumstances, and yet be flexible enough to alter or restrain those behaviours as those circumstances necessitate.

ii. Internal problems

In addition to being unlikely relative to other mechanisms for the promotion of behaviours, for the reasons given above, the concept of illusory moral guidelines is also beset with internal difficulties which affect its usefulness in this regard. One of these is what may be called the 'situation-action lag'. This represents that period between the perception of a situation and the exhibition of the adaptive behaviour. In instances where this gap is wide (such as when a rabbit is confused by a fast-approaching car and cannot decide which way to flee), there is a definite disadvantage present. If gap is narrower (such as in the strike of a frog's tongue at a passing fly), an advantage is conveyed instead. With respect to moral guidelines, relative to other behaviours, an argument can be made that this lag is significant. The breadth of the gap is because of the reflection and deliberation which accompanies the making of moral decisions. The more such thought is necessary to the practice of morality, the wider the gap becomes and the less adaptive the mechanism. It is therefore understandable why Ruse says that 'too heavy an emphasis on thought in morality worries

me'.[230] One might reasonably ask the question whether a simpler, more straightforward desire to perform certain behaviours might be more adaptive than the time-consuming, often confusing and sometimes agonising deliberative capacity that we have now. If morality arose as an adaptation, its efficiency is dubious when one looks at the history of moral philosophy, which is characterised by millenia of this capacity challenging and often bewildering humans. Similar obstacles to efficient and consistent action do not seem to plague other behavioural traits, traits which (as was defended in the last subsection) do not seem to be relevantly different from effective altruism.

Another stipulation for the usefulness of this mechanism is the relative infrequence of situations where people do not do what is in accordance with those objective guidelines. As Francisco Ayala has written, even if our biological nature predisposes actions in accordance with certain principles, 'it does not constrain us to accept them, nor to behave according to them.'[231] Consequently, the problem that Euripides mentioned is widely known: 'we know and see what is right, yet fail to carry it out'.[232] In order for Ruse's proposed mechanism to work, the majority of people in the majority of cases must be intentionally altruistic insofar as it contributes to effective altruism. Whether this is the case is an empirical matter, so this is a fruitful area for discussion among sociologists, psychologists and moral philosophers.

d. *Contingent/objective dichotomy*

The above subsections criticise, from a generally scientific perspective, P3 of Ruse's reasoning: the claim that illusory objective guidelines have arisen as a vehicle for effective altruism. How this claim

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[230] Ruse (1995), 266.
[231] Ayala (1987), 312.
[232] *Hippolytus*, 39.

squares with the content and scope of morality will be taken up in the more ethically-based half of the critique. Here the next premise of Ruse's argument will be examined: P4, or the claim that there are serious implications to the idea that morality might not have come about at all.[233] Since morality is *contingent* on the particular evolutionary history of our species, Ruse claims that it cannot therefore be *objective*, which for him means relating to something above and beyond our biology. In the moral case, this objectivity is the basis for the prescriptivity, universality and nonsubjectivity we attribute to moral principles. If this dichotomy between contingency and objectivity does not hold, Ruse's P4 would likewise not hold, for according to Ruse it is the contingency of morality that leads him to propose that its objectivity is illusory.[234]

Ruse does admit that the dichotomy does not hold for all things. Our ability to see is contingent on our particular history, but no one would claim that this provides any reason for thinking that a predator has no objective status. So, the dichotomy Ruse perceives between the contingency and objectivity of morality cannot be inherent in the concepts of contingency and objectivity themselves. Rather, a particular difference between the moral capacity and perception must be the factor which justifies this belief regarding morality.

Ruse claims this particular difference to be the adaptive value to be gained by perception versus the lack of adaptive value of a genuinely objective morality over and above the illusory moral guidelines we have now.[235] This is an improper use of the adaptationist principle, however. As was shown earlier, even if a trait is genetically predisposed, there are

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[233]This raises the perennial issue in evolutionary biology and physics of the nature of chance. Monod (1972) is a classic work on this issue; responses to it are in J. Lewis, ed. (1974). Some later discussions are S. Gould (1980); Davies (1982); Prigogine and Stengers (1984); Gleick (1987); Stewart (1989).
[234]Ruse (1995), 268.
[235]ibid., 250-1.

several ways besides being adaptive in which it can arise and persist in a population.[236] Although often criticised for this, sociobiologists often work on the basis of assumptions, backed with varying degrees of evidence, that traits are adaptive. Sometimes their efforts are rewarded, and traits which were previously thought not to be adaptive are shown to be so.[237] However, although traits regularly have adaptive value, and although assumptions to this effect are commonly made in evolutionary biology, this is no licence for someone to make the assumption that if something is *not* adaptive, it cannot exist. A belief that actual moral guidelines are not more adaptive than an illusion of their actuality, even if true, does not justify a denial of the actuality of moral guidelines. If moral guidelines are actual rather than an illusion, they are so regardless of whether they contribute any differently to our evolutionary success than an illusion of their actuality does. In short, there is no necessity that moral guidelines in and of themselves be adaptive at all; so, of course, there is no necessity that they be adaptive over and above the adaptivity of our belief in them. Moreover, the belief that something is not adaptive is a belief that no evidence is available for its adaptivity. It is not a claim that such evidence is theoretically impossible. This is the very source of the strength of the adaptationist's position. Anything claimed not to be adaptive could theoretically at any time be shown by additional empirical evidence to be adaptive.

Incidentally, the very fact of Michael Ruse making arguments for the illusory nature of moral guidelines, if believed, undermines our genetic 'push' towards altruism, and so seems to suggest that actual moral guidelines would indeed be adaptive relative to an illusion of such guidelines. If we see moral guidelines as an illusion, there seems no reason to believe that we

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[236] Section B.1d.
[237] Cronin (1991), 94-5.

will still follow them. If this is true, the advantage to be gained from the illusion would be lost. On the other hand, if this is false, and we would still follow them, then the illusion of moral guidelines was not necessary in the first place! If Ruse believes that morality can operate just as well when we have seen the light, i.e. when we know there to be no objective guidelines, then his main thesis that 'human beings function better if they are deceived by their genes...'[238] is undermined. On the other hand, if we do function better to any extent when deceived, the conclusion is inevitable that if our corporate illusion is shown to be such, altruism will decline, and our gene pool will suffer for it. However, if Ruse's theory were shown to be false, and people could still honestly believe in actual moral guidelines, altruism would not be affected, and so the benefit to be gained by that behaviour would continue. Therefore, the very possibility of Ruse making the claims he is making, is evidence for the adaptivity of actual moral guidelines above and beyond the adaptivity of an illusion of those guidelines. The reason for this is that an illusion can be discovered, whereas the real thing will stand up to any investigation. This is not an argument for morality having arisen because of its adaptive value, nor for the actuality of moral guidelines. Rather, it demonstrates that Ruse's claim that moral guidelines are not adaptive whereas sight is adaptive is not a fruitful way to achieve an important difference between them (a difference necessary in order for Ruse to claim that things we see can be objective whilst things we morally believe are not). First, moral guidelines can exist without being adaptive. Second, one cannot dogmatise that actual moral guidelines cannot be adaptive in and of themselves. In fact, there is good reason to suspect that actual moral guidelines would be adaptive over and above the adaptivity of an illusion of their actuality, thanks to Ruse's own theorising.

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[238]Ruse and Wilson (1986), 425.

This argument suggests that an analogy is still possible between moral beliefs and such things as perception, only to the extent that both of them might make claims about something which is above and beyond our biology (i.e. objective in Ruse's sense), whilst our capacities for them are contingent on the evolutionary process.[239] Arguments that the analogy cannot hold, beg questions against morality being truly objective in the sense that Ruse believes we falsely think them to be. In order not to beg the question either way, one must recognise the possibility that the contingent capacity of morality can, but also might not, reflect something universal, prescriptive and nonsubjective. A discussion from the scientific perspective is therefore not sufficient to establish a conclusion either way. One must take moral philosophy into consideration.

2. ARGUMENTS FROM THE PERSPECTIVE OF MORAL PHILOSOPHY

a. *History and justification: the genetic fallacy*

Naturalists, as represented in this thesis, have tried in three general ways to approach the problem of supporting their meta-ethical views. Avoiding the problems of the logical and semantic approaches has led many, including Ruse, to adopt a more synthetic approach, where scientific facts lead one to a naturalistic view of ethics. One is misguided, then, in employing Hume's Law or Moore's 'naturalistic fallacy', as they stand, against such views. In Ruse's case, the scientific facts used are sociobiological facts, and the proposed view of ethics is a meta-ethical

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[239] Another analogy that might be made is to the truths of mathematics. Although mathematical knowledge is contingent on the evolutionary process, probably no one would claim that mathematical principles are nonobjective in the sense that Ruse claims moral principles to be. The counterargument and rebuttal offered above regarding perception pertain equally well to mathematics.

scepticism or nihilism.[240] The sociobiological facts specifically regard the origin and growth of moral thinking, and this provides the supposed connection to meta-ethics. Ruse feels that a proper understanding of the *history* of our moral beliefs will yield a conclusion regarding the *justification* of our moral beliefs-- namely, the conclusion that no justification is possible at all.[241] Several writers have declared a fallacy to be present in this move. James Rachels conducts the following thought experiment to illustrate this:

> 'Imagine that someone proposed eliminating the study of mathematics, and replacing it with the systematic study of the biological basis for mathematical thinking. They might argue that, after all, our mathematical beliefs are the products of our brains working in different ways, and an evolutionary account might explain why we developed the mathematical capacities we have. Thus 'mathobiology' could replace mathematics. Why would this proposal sound so strange? It is not because our mathematical capacities have no biological basis; nor is it because it would not be interesting to know more about that basis. Rather, the proposal is strange because mathematics is an autonomous subject with its own internal standards of proof and discovery.'[242]

There are many examples of such criticism, some variations of which employ the term 'genetic fallacy'.[243]

This argument may be true, strictly speaking, but one should understand the reason why Ruse has remained unimpressed by the accusation. The history of how one came to a belief may not *logically* rule out the possibility that the belief is correct, but it may nevertheless shed light on the validity of our reasons for believing it. Few would disagree that if a certain belief were injected into our minds by an evil genius, and if we came

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[240] Ruse (1989), 250 calls his view 'moral nihilism'; (1991), 507 calls it 'ethical scepticism'.
[241] 'Justification' here, of course, does not mean justifying the mere fact that we have these beliefs, but justifying the truth of the content of those beliefs.
[242] Rachels (1990), 78-9.
[243] Dennett (1995), 470. Ruse (1995), 270-1 says that this is the most common argument levelled against him.

to be aware of this, then we should have reason to doubt whether we were ever justified in believing what we did. That belief may very well be true, but an evil genius might just as easily place a false belief in our heads. If Ruse is right, that our beliefs were manufactured by our psychology in order to make us altruistic, we may likewise have reason to question the truth of the content of those beliefs. The possibility remains that our beliefs are true. But if a false belief aids our survival, from Ruse's perspective there seems no barrier to such a belief propagating in our population, however unsavoury the idea might be to us. Therefore, two of moral philosophy's most popular exports to the philosophy of evolutionary biology, the 'naturalistic fallacy' and the 'genetic fallacy', are unlikely by themselves to stop the scepticism which Ruse claims to be unavoidable because of sociobiology. Insofar as these 'quick fixes' are the extent to which one delves into moral philosophy, one may certainly expect many naturalist theories to be refuted by them, but Ruse's theory is not likely to be among them. From the perspective of moral philosophy, Ruse's theory is more appropriately examined by looking at the way he characterises morality, than by attempting to find a fallacy in his progression from matters of history to those of justification.

b. *From biologically sound altruism to morality: normative discrepancies*

P3 of Ruse's reasoning, that morality is a tool for the production of behaviour that is adaptive by the theories of kin selection and reciprocal altruism, is actually three premises in one:

1. Intentional altruism has been developed as a vehicle for effective altruism.

2. Universal, prescriptive and nonsubjective guidelines have been put in place in our minds to ensure this intentional altruism.

3. Such intentional altruism ensured by universal, prescriptive and nonsubjective principles is what defines morality.

The focus of the argumentation so far regarding P3 has been twofold. First, one should doubt the happy congruence that is claimed to exist between the effects of intentional altruism, and effective altruism as predicted by sociobiology (this criticises subpremise 1).[244] Second, it is very doubtful that universal, prescriptive and nonsubjective guidelines are, or would ever be, the way we would evolve to exhibit effectively altruistic behaviour (this criticises subpremise 2).[245] The plausibility for these two subpremises depends on assumptions which are either unwarranted or confused. Here the third of these subpremises, the most explicitly ethical of them, will be criticised. Is the picture one that bears sufficient resemblance to our experience of morality to lend plausibility to Ruse's theory? Let us suppose that intentional altruism produced effects which on the whole were in line with effective altruism as predicted by sociobiological theory. Let us suppose also that universal, prescriptive and nonsubjective guidelines were the biological tool by which such behaviour were assured. The question then arises as to whether the scheme thus constructed is like the scheme of our moral experience. One way to test this is to compare the normative principles that arise from the schemes.

There is certainly overlap at the normative level between the two schemes; indeed, such overlap provides a degree of plausibility that must have sparked the imaginations of such thinkers as Wilson and Ruse to believe that the schemes were in fact identical. Regarding kin selection, it is safe to assume that humans do feel on the whole that contributing to the welfare of family is a morally praiseworthy, even obligatory, function. We

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[244]This is the argument of section D.1b.
[245]This is the argument of section D.1c.

may look with genuine moral disapproval upon those who allow their children to live dangerously or unhealthily. We may certainly feel, as early sociobiologists predicted, a moral obligation to risk our own welfare to save aunts, uncles, cousins, brothers, sisters and other family members who are in danger. Reciprocal altruism takes into consideration much more of what we consider morality to be about. We should attempt to save from drowning not only those who are related to us, but anyone. Of course, in the early days of humanity those one found drowning were likely to be members of one's own community or communities nearby. However, the same impulses that initially resulted in reciprocation within these close-knit groups are now possibly leading us to be altruistic towards those we do not even know. Morally speaking, many others besides our relatives should be considered 'our brothers and sisters'. In fact, our altruism towards others may not benefit our genes only from *those individuals*' likelihood of paying us back, but also because of the better reputation we might get in the community as an altruist, which would pay us dividends if we were ever to be in trouble. In addition, one is more likely to produce offspring if one can impress a mate; and in a community where reciprocation is respected, a mate will surely look for a person with honourable and altruistic tendencies, among other qualities. We may look upon people with those tendencies with moral approval, and those without such tendencies we may morally condemn. Thus, insofar as morality breeds co-operation, mutual caring, and sacrifice on each other's behalf, morality seems to be in line with the predictions of sociobiology. There are, however, serious discrepancies between the two schemes on the normative level. Just a few of these are described here for examples.

i. The moral considerability of the nonaltruistic

'Cheats', sociobiologically speaking,[246] are not those who actively do things which are detrimental to the welfare of others. They are not murderers, thieves, kidnappers, terrorists, or rapists-- or, if they are, they are not called cheats because of this, but because of something else. Cheats are those who, although helped when they need it, do not help others back. A chimpanzee who, having been cleaned of parasites by another, is presented with the other's back in a plea to return the favour but promptly walks away from the scene, is a cheat. A cheat is defined for the 'good' he has *not* done, rather than for the 'evil' he has done.

Sociobiology predicts that cheats must not be treated with the same respect and altruism as other altruists, or else reciprocal altruism will fail because there is no benefit to being an altruist and plenty to being a cheat.[247] Thus the entire edifice of biological altruism, insofar as it depends on reciprocation, depends on the exclusion of cheats from the category of 'those whom I must help'. If one is a 'sucker'-- that is, if one helps those who do not help back-- then one is doomed to biological failure when faced with cheats. The only hope is to be a 'grudger', who can distinguish between those who return favours and those who do not, and to mete out one's aid accordingly. The problem arises when one translates this into moral language. Morality, to be in tune with biological altruism, must exclude cheats from the realm of moral considerability. Prohibitions against stealing, murder, rape, blackmail and slander should be seen as only regarding those who are altruists or family members. One might object that it is an evolutionarily stable strategy not to murder at all; for if one is psychologically able to murder cheats, one might more easily murder noncheats with whom one has a disagreement. But this must be weighed

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[246]The same, strictly biological, sense of the word 'cheat' and its cognates is meant throughout this section.
[247]This is discussed and referenced in section B.2d.

against the strict and vital necessity to keep the level of cheats in the population low, and the just as vital necessity to withhold beneficence from them. Evolutionarily speaking, it is advantageous for the success of biological altruism in a society to retaliate against those who are cheats, just for the mere fact that they are not altruistic.[248] This would ensure the maintenance of the reciprocating community by keeping the levels of cheats in the population low.

In modern society, such behaviour would surely be morally offensive. To disregard people morally, or even to retaliate against them, merely for their failure to help in our time of need, may be a common emotional reaction, but few would morally sanction such behaviour. We may very well have a psychological constitution that predisposes us to search for cheats,[249] but it seems that our actions regarding them are subject to the same moral constraints as our actions regarding anyone else. The equal moral considerability of all people, regardless of whether they are morally upstanding themselves, is a fundamental principle of most moral philosophies, and arguably all prominent modern ones. This does not necessarily mean that we have equal moral responsibilities towards everyone at any given time, but to say that their omission of altruistic behaviour towards us gives us licence for morally disregarding them is a claim that is not often found in moral philosophy or moral teachings. Few if any moral philosophers include any reference to one's actions, not to mention omissions, in their assessment of the moral worth of a human being or our responsibilities to a person in a particular situation. The reason why variables such as x or A are so often used in moral philosophy to represent people is precisely because *the identity of the person in a situation is not of significant moral relevance*. Saving an altruist from drowning is a morally

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[248] Axelrod (1984) discusses retaliation against cheats as an adaptive strategy.

[249] See, for example, the psychological data provided by Leda Cosmides (1989); see also Cosmides and Tooby (1989).

praiseworthy action; but before morality is therefore linked with biological altruism, one should realise that saving a cheat from drowning is morally praiseworthy as well. If biological altruism were the root of our morality, we should be morally untarnished if we were to sit on the pier and have a picnic as the cheat drowns, provided he is not related to us.

One might recognise some type of difference between the rescuing of the altruist and the rescuing of the cheat, but this cannot be a significantly *moral* difference. In both cases a human being, with frailties and strengths in all areas including the moral, is in danger of losing life. There most probably is a *psychological* difference between rescuing the one and the other, in light of the fact that the first is morally upstanding whereas the second is known not to care about others who are drowning. It may be much easier for us to help the one rather than the other. Why, though, should a difference in one's psychological ease in rescuing two people translate into a difference in the moral status of the rescue? In fact, in some philosophies such as Kant's, the saving of the life of the cheat would even be more morally praiseworthy, for Kant wrote that 'the moral worth of the character is brought out which is incomparably the highest of all' when a person 'is beneficient, not from inclination, but from duty'.[250] Surely, in line with reciprocal altruism, our *inclination* is to help those who are altruists themselves. Such an inclination is evolutionarily sound. To do as Ruse has done, however, and claim that this inclination is by itself the dictate of *morality*, is grossly to mischaracterise the nature of morality. Roger Trigg claims reciprocal altruism's guidelines for the treatment of cheats to be a 'prime example of how dangerous the reduction of human morality to kin and reciprocal altruism really is'.[251] In addition to its danger, it is simply a mischaracterisation of what morality is like. One does

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[250]Kant (1785), I.15. This is not intended to endorse his position or assume its truth.
[251]Trigg (1982), 120.

not need to be a follower of Socrates or Jesus[252] to understand that however much we may dislike certain people, our moral responsibilities towards them are not significantly affected by our beliefs as to whether they have treated, or would treat, us in a similar way in a similar situation. This is, however, an inherent and absolutely indispensable part of an ethical theory which sees morality as a tool for biological altruism. One cannot object, moreover, that we should just disobey *those* motives in favour of our more altruistic ones in general. The very capacity for making such a moral claim is what Ruse is saying has proceeded from biological altruism. If we say that this tool can be put to immoral uses, then we are speaking from outside of biological altruism, and our moral codes must be coming from somewhere else.

ii. The moral considerability of those unable to reciprocate

On Ruse's characterisation of morality, there are several classes of entities which are not morally considerable; in other words, we have no moral responsibilities as touching those entities. Among these are all entities which are not closely related to us[253] and are not reciprocating members of our human society, for none of the models for altruism which have been discussed can account for any moral responsibilities that we have to distantly related or unrelated entities which do not pay us back for our troubles. Already having been discussed are those people who are not altruistic because they lack the corresponding genetic disposition, or else they just choose to go against their altruistic motives in favour of other motives; these are 'cheats'. Also in the category of 'morally unconsiderable' are those who, for one reason or another, are not able to reciprocate altruistic

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[252]These are the two moral teachers castigated by John Mackie (1978) for having perpetuated the moral considerability of immoral people.

[253]Recall how quickly kin selection dissipates as individuals become more distantly related. It is significant regarding immediate family, but even first cousins share only 12.5% of one's distinctive genes. It would take 8 cousins simultaneously in a needy situation to outweigh the adaptive value of (biological) egoism on the basis of kin selection.

actions. If the permanently infirm, the incapacitated elderly, the mentally retarded, the insane, and the permanently imprisoned are not able, even if they wished, to reciprocate, natural selection would not favour altruistic behaviour towards them. Aid given to such people wastes time for they cannot return it, and those whose genes prescribe such aid will suffer a net loss of precious energy for nothing in those situations. In biological terms, energy is the stuff of survival. In times of stress or competition, those who spend their time taking care of the permanently infirm or incapacitated are not likely to survive over those who are burdened with no such obligations. Ruse, who emphasises the reciprocal nature of the altruism that has led to the origin of morality,[254] must deal with the fact that our society is not completely made up of reciprocating members.

To say that such individuals are not appropriate for moral consideration, or are only appropriate insofar as our actions towards them have emotional consequences on others in our society, runs contrary to the normative guidelines of many, perhaps most, people. Although some might be tempted to view people in life imprisonment or in the final debilitating stages of cancer as morally worthless, or solely as means to the emotional ends of others, such is arguably not the usual moral position to take on the issue in a civilised society. Probably most people would regard a nonchalant onlooker to the drowning of a person with a relatively severe Down's Syndrome as failing to live up to one's moral responsibilities regarding *that person*, not merely to others in the society; in fact, it would seem irrelevant to wonder whether any other people in society care about or even know the individual. The fact that such a person cannot reciprocate such or other beneficence, means that in evolutionary terms it is disadvantageous to waste any energy in the attempt to save that individual. In moral terms, on the other hand, the situation seems very different.

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[254]Ruse and Wilson (1986), 426; Ruse (1995), 273.

One might object that it is an evolutionarily stable strategy to be altruistic to all members of a society (excluding cheats), for those who do not return the favour because of a lack of ability are not going to be very frequent. This is confused, however, for there is no evolutionarily significant difference between cheats and those who are unable to reciprocate for whatever reason. As far as biology is concerned, both types of individual do not reciprocate. Whether this is because of a lack of genetic disposition towards altruism, or a failure for any reason to live up to that disposition, is irrelevant. Altruism provided to such individuals is not returned, and so natural selection should favour a genetic disposition to withdraw altruism from those individuals. Any evolutionary strategy which advocated altruism in general would advocate it towards those with life sentences, the permanently bedridden, the terminally ill, and the mentally incoherent, but would also advocate altruism to cheats. Such would spell disaster for reciprocation, for cheats would then prosper and the altruistic strategy would eventually collapse. To claim that a strategy would ever develop any mechanism to distinguish between cheats and those unable to reciprocate for other reasons, requires that there be something particular about the latter group which can aid the reproductive potential of their benefactors. But the distinctiveness of that group is that they have nothing to give, and so no mechanism would ever develop to separate them from the more straightforward cheats.

Other entities which are nonreciprocating and thus outside of the realm of moral considerability on Ruse's view of morality, are any entities other than *Homo sapiens*. Ruse admits this, claiming that

> 'Morality is the creation of the genes to help us get on with our fellows, not to help us get on with physical creation. As such, we should not expect to find, as indeed we do not find,

> that morality has any existence beyond the relationships between individuals.'[255]

Of course, many views of moral responsibility regarding animals or the environment claim such to be a deduction from strictly human ethics. This might be called *anthropocentrism* in ethics. Although this issue will not be explored here, it is sufficient to bring up the fact that this is debated, and many believe the nature of our moral responsibilities regarding nonhuman entities to be of a sort that is not anthropocentric; i.e., that a natural entity besides a human can be a 'primary target for an ethic'.[256]

iii. The moral considerability of oneself

On Ruse's conception of morality, what one does to oneself is morally irrelevant. If altruism is the defining characteristic of morality, then attention to oneself is actually the antithesis of moral action. This is another implication from his denial 'that morality has any existence beyond the relationships between individuals'.[257] If it were to have any such existence, such as in the care of one's own mind and body, it would be beyond the scope of Ruse's theory to explain it. In order to incorporate it, he would have to postulate that our biology has invented objective guidelines regarding our treatment of ourselves as well as that of others. By so doing, however, he would have to back down on two positions which are major points in his thesis. First, he would have to admit that morality is not limited to the interrelationships among human individuals. Once this barrier is down, however, there is no reason to believe that nothing else could possibly reside within the pale of human morality and moral consideration.

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[255]Ruse (1995), 290-1.
[256]Rolston (1988), 1. The rest of the book is a defence of this view. A few of the other works which advocate a nonanthropocentric ethic are Leopold (1949); Singer (1975); Taylor (1986); Callicott (1989); Naess (1989); Attfield (1991). A debate closely related to this is whether there is 'intrinsic value' in nature or natural entities besides humans. An introduction to this discussion is the collection of articles in *The Monist* 75:2 (April 1992).
[257]Ruse (1995), 291.

His theory would be reduced to one of a number of ways in which we are biologically motivated to perform certain actions we call 'moral' for some other reason. Second, he would have to redefine 'moral' as something other than 'other-regarding'. Once this is done, however, the identity he proposes between altruism and morality will be broken; and if morality is larger than altruism in this way, it might be larger than altruism in other ways as well. The *nothing but* will have been removed from the thesis that 'morality is nothing but a vehicle for biological altruism'. Denial is therefore vital to his thesis.

Whether this accords with moral experience is another matter. Ruse has been criticised on the grounds that 'Self-regarding behavior need not be either amoral or immoral',[258] and this does seem to accord with the bulk of the history of moral philosophy. Plato claims that justice, a fundamental ethical term, consists in the harmony of the different aspects within a person.[259] Aristotle concentrates on the happiness of the moral agent as an ethical end.[260] The Stoics preach that one should aim for one's own serenity.[261] Joseph Butler pointed out two facets of morality: the private and the public good, the former having to do with oneself.[262] Kant's practical imperative was: 'So act as to treat humanity, whether in thine own person or in that of any other, in every case as an end withal, never as means only'.[263] Nietzsche spoke of a 'creative egoism'.[264] G. E. Moore claimed that one of the greatest ethical goods was one's own contemplation of beauty.[265] The list by no means stops here, for anyone who finds normative guidelines to have something to do with the nature of humanity,

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[258]Rottschaeffer and Martinsen (1990), 380.
[259]*Republic*, IV.443c-e.
[260]*Nicomachean Ethics*, I.
[261]Epictetus, *The Discourses*, IV.ch.3.
[262]Butler (1726), I.27-32.
[263]Kant (1785), II.47.
[264]Nietzsche (1889), no. 373.
[265]Moore (1903), ch.6.

will of course find oneself to possess that nature just as much as another. Ruse himself even speaks briefly of duties to oneself,[266] but as has been noted by other critics, he 'does not seem to recognize its significance for the issues of the nature of moral sentiments and the content of morality'.[267]

iv. The content of sociability

In addition to the various classes of entities which are not rendered moral considerability on Ruse's view, there are other types of normative discrepancies even with regard to those whom Ruse does admit within the scope of morality. These discrepancies have to do with the particular guidelines that would be sanctioned for sociability as determined by the models for biological altruism. As another evolutionist has noted, if what is morally right is held to be a certain subset of those actions that 'achieve biological gain (because that is, in their view, why the moral sense evolved at all)' then this type of morality 'would justify social attitudes that many of us (sociobiologists included) would judge morally obtuse and even heinous'.[268] To take a few examples: The rich are more likely to be able to reciprocate than the poor, so it seems likely that natural selection would favour those who developed a greater moral regard for the wealthy than for the impoverished. One's stepchildren or adopted children, not bearing anywhere near the same percentage of one's genes as a biological child, would not be entitled morally to the same treatment and preference given to other children, for such derives from kin selection; rather, one's moral responsibility to such children is the same as that to any other close member of the community, as reciprocal altruism would suggest. Natural selection would select for an individual who was able to determine correctly whether his reputation as an altruist was at stake in a specific situation; such an

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[266]Ruse (1986a), 217.
[267]Rottschaeffer and Martinsen (1990), 380.
[268]Ayala (1987), 316.

evolutionarily refined person would not feel, and would therefore not have, any moral obligation to help someone who could not possibly discover his lack of altruism in a certain situation. Reciprocal altruism suggests that people who 'turn the other cheek', or repay evil with good, are deplorable, for those people are responsible for the success of cheats and they thus endanger the success of reciprocation in the community; natural selection would favour retaliation against such people in the name of morality, just as we should retaliate against the cheats themselves.

Other questionable moral guidelines exist, but these are enough to show that a translation of biologically adaptive altruism both leaves out many moral principles which are widely regarded as binding, and claims many principles to be moral which are widely regarded as appallingly immoral. Moreover, it is not merely the specific normative rules given by a sociobiological conception of morality that are severely misaligned with the nature of morality as most often conceived. The more fundamental, meta-ethical explanation of what morality is and what moral guidelines are like requires similarly focused critique.

c. *From biologically sound altruism to morality: meta-ethical issues*

Ruse makes several statements about the characteristics of morality which would be considered meta-ethical, some of which have been described already. His claim that morality is prescriptive, universal and nonsubjective will not be criticised, as this description is relatively widespread. Other aspects, however, are more vulnerable to criticism.

i. Contingency of moral principles

It is one thing to say that the capacity we call morality is contingent on the evolutionary process; in other words, that we did not have to be moral creatures. It is, however, entirely different to say that the moral

beliefs we hold are contingent, in the sense that they could be entirely different while we still remained moral beings. Ruse makes both claims: the first has already been accepted but found to licence no conclusions regarding the actuality of that which we believe about morality.[269] The second claim requires a more directly ethical argument.

Ruse supports the contingency of our moral beliefs with the argument that if they were not contingent, and if our biology were different, moral codes would be absurd. If we had evolved from creatures that, for example, 'need to eat each other's faeces', some of what we consider to be objective moral guidelines would make no sense.[270] This, however, places too strict a criterion on the objectivity of morality, a criterion that is not inherent in any of the three words which have been used by Ruse to characterise it (universality, prescriptivity, nonsubjectivity). In order to believe moral truths to be of any reasonably objective nature, there is no stipulation that, with any possible biological constitution, every normative guideline in morality must be exactly the same as it is with our present constitution. Surely, if adultery is wrong, our being able to marry is a necessary condition. Likewise, if killing is wrong, our being living creatures is a necessary condition. The normative guidelines in any ethical code, no matter how robust, depend to some extent on the nature of that organism which they concern. If we had the biology of termites, as Ruse imagines, there would clearly be no prohibition against feeding our children faeces. But as it is, we are not termites, and the normative rules we embrace are therefore different. One does not have to be of any particular philosophical position, naturalist or not, to believe that our moral principles can only exist as they are because we are the way we are.

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[269]This was the argument of section D.1d.
[270]Ruse (1989), 270.

This does not suggest a relativism about morality. Assuming that a moral creature with a biology different from our own is possible, our normative guidelines, in fact, might be interpreted as applications to our specific human nature of broader principles common to various possible natures. There is nothing in Ruse's argument to contradict the possibility that at a certain level, ethical principles are universal not only to all humans, but also to all possible moral creatures of whatever (hypothetical) biological constitution. In this case, it would only be as we describe the natures of individual moral creatures that these broader principles translate into more relevant guidelines for each type of creature. Therefore, his illustration does not prove anything except the fact that if we had a different biological constitution, we might have different moral principles on the normative level-- a fact that no one need deny. So, Ruse's claim that moral principles are contingent is misleading, as it does not prohibit, nor even promote any degree of scepticism about, the objectivity of morality or the actuality of moral guidelines.

ii. Strict emotivism

Ruse's theory as to the origin of moral guidelines claims that morality is nothing but sentiment, in accordance with Wilson's belief.[271] This presupposition is not mandated or even hinted by any of the findings of sociobiology or general evolutionary biology that have been discussed here, and yet Ruse and Wilson both adopt the view without much attempt to justify their position. Many philosophers believe emotion to be an important part of morality in some way, but whether morality is solely a matter of

[271] Ruse (1986), 236; Wilson (1975), 3-4.

feelings is a very hotly debated point in moral philosophy,[272] and one's position on the matter requires some support. An obvious class of alternatives is some degree of rationalism. Peter Singer makes this point:

> 'There is an alternative to regarding ethics as no more than the outpouring of our emotions. Ethical judgments may have a rational component. In his zeal to take over ethics, Wilson overlooks this position, held by Socrates, Plato, Aristotle, the Stoics, Aquinas, Kant, Sidgwick, and many other philosophers. The debate over the roles played by reason and emotion in ethics has been at the center of Western ethical philosophy since its beginnings in ancient Greece; yet Wilson assumes without argument that reason has no significant part to play in ethics.'[273]

To Ruse and Wilson, one may present the perennial problems that have dogged strict emotivism. For instance, that moral disagreement is possible and susceptible to some degree of rational argument has been identified as something without which a theory cannot possibly be considered ethical.[274] Emotivists find it difficult either to incorporate or explain away such aspects of morality. This and other arguments will not be elaborated here. Instead, one point will be mentioned regarding the way Ruse establishes his emotivism and, consequently, his meta-ethical scepticism.

Wilson began the elaboration of sociobiology in his *magnum opus* with the claim that 'The biologist' knows that the work of 'ethical philosophers' is the consultation of emotions.[275] It is this presupposition, not defended but assumed from the beginning, which lays the foundation for Wilson's project: to use this realisation, plus sociobiological knowledge, to

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[272]Smith (1994a), ch.1. Significant arguments against or alternatives to emotivism in recent decades include T. Nagel (1970); Foot (1972); (1978); Midgley (1981); B. Williams (1981); Korsgaard (1986); Brink (1986), (1989), 39ff.; Hare (1989); (1989a); Wallace (1990); McDowell (1978); (1979); (1995); Dancy (1993); (1995); Blackburn (1995); Lawrence (1995).
[273]Singer (1981), 86-7.
[274]Smith (1994a), 38-9.
[275]Wilson (1975), 3.

'explain ethics and ethical philosophers... to all depths'.[276] Michael Ruse, working from Wilson's results, seeks to use them to determine the nature of morality. As has been repeatedly described here, one of his conclusions is that our morality, no matter how objective it may seem to us, is actually a set of figments of our imagination, genetically-induced hallucinations. They serve a purpose, but not at all like that which we have always thought.

The peculiar thing about this train of reasoning is that the conclusion follows from that first presupposed claim of Wilson's, twenty years before Ruse's most significant elaboration of his ethical theory. Sociobiological ethics has begun and ended with the claim that morality is really subjective, in that it is a matter of emotion on the order of, in Wilson's words, 'hate, love, guilt, fear, and others'. This having been Wilson's springboard, it is strange to see it presented as Ruse's destination. In this light, the conclusion that moral guidelines are subjective and meta-ethically unjustifiable is not surprising, given that this view was already implicit in the raw materials which Ruse used in the construction of his theory. Insofar as he uses Wilson's emotivism-laden view of the connection between biological altruism and morality to begin his case, subjectivism and consequently meta-ethical scepticism are foregone conclusions. A very strange conclusion within the context of Wilson's strict emotivism, perhaps unheard of in moral philosophy, would be that moral guidelines were also justifiable and truly objective in the sense of referring to a moral truth above and beyond our biological constitution. Such would require a peculiar, presumably coincidental match between what we happen to feel for biological reasons, and what is justifiably and objectively right regardless of our biology. Meta-ethical scepticism of the sort Ruse describes, therefore, seems inevitable given his presuppositions. Given this fact, Ruse's uses of

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[276] ibid.

evolutionary theory and models of biological altruism are, to the end of justifying his meta-ethical scepticism, irrelevant.

Moreover, the same sociobiological evidence could be used in a context which does not justify his position at all, if the initial presuppositions about morality are different. If one is already a meta-ethical sceptic, sociobiological data can help one to fill out one's position, as it has in Ruse's case: morality is nothing more than a set of emotional predilections which serve the biological function of assuring that we exhibit certain types of behaviour. However, if one is not a meta-ethical sceptic to begin with, one is not likely to get beyond page 3 of Wilson's *Sociobiology* without insoluble philosophical disagreement. Such a person can accept all of what is presented and documented as the empirical matter of sociobiology,[277] but can have a much different view on the meta-ethical significance of kin altruism, reciprocal altruism, and so on. If morality is thought to be not at all like emotions constructed to assure biological altruism (which, if the arguments of the foregoing pages are sound, seems to be the case), then one can agree with everything Ruse and Wilson say about the emotions or psychological tendencies towards biological altruism which have evolved, without assenting to that drastic presupposition/foregone conclusion, that the emotions or tendencies which are being discussed define *morality*.

iii. The illusory nature of meta-ethics (except for Ruse's)

Perhaps the standard type of critical argument offered to any meta-ethical theory is the claim that it mischaracterises central features of morality. Philosophers have understandably begun to employ this familiar strategy in critique of Ruse's theory. He has been criticised, rightly or wrongly, for inadequately accounting for 'the full-fledged moral modalities

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[277]For constraints on the applicability of this term see section D.1a.

of prescriptivity and universality that are associated with the experiences of obligation and duty'.[278] He has been said to have neglected the fact that 'impartiality and categorical content are among the defining characteristics of the moral'.[279] It has been claimed that he does not recognise the 'importance of the agent's *knowing* and being able to reflect upon the value of his own acts' which is 'a central aspect of ethical conduct being ethical at all',[280] or the necessary element to morality of determining 'how the conflicting desires of different individuals are to be adjudicated'.[281]

Whether any of these accusations is meta-ethically well-founded, however, is likely to be viewed by a defender of Ruse's theory as an irrelevancy. The reason for this is that the theory claims meta-ethics itself to be part of the illusion. According to the theory, the universality, prescriptivity, and nonsubjectivity of morality are manufactured by our genes in order to assure certain behaviours. Meta-ethics is the field within which those three features, and presumably others, are discovered and explicated as features of moral experience. Any non-Rusean meta-ethics is therefore the philosophical study of an illusion, or the attempt to elucidate the truth of a matter whose one truth is that all the other 'truths' are merely the result of a genetically-induced hallucinosis. If one wishes to entertain notions of impartiality and categorical content, of knowledge, reflection and disagreement in morality, then Ruse need not refute such claims philosophically. He need only apply one of two general arguments. If the feature at hand would tend to reinforce our likelihood of performing effective altruism (e.g., categorical content), Ruse can claim it to be part of the illusion. On the other hand, if the feature would tend *not* to reinforce our likelihood of performing effective altruism (such as the possibility of moral

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[278] Rottschaeffer and Martinsen (1990), 386.
[279] Sorell (1991), 166.
[280] George (1992), 191.
[281] Kitcher (1994), 448-9.

disagreement), Ruse can accept this as well, as merely a feature of the evolutionarily necessary implausibility of his view. There are good evolutionary reasons why we should view Ruse's theory as ridiculous even if it were true. As he says, 'if we recognized morality to be no more than an epiphenomenon of our biology, we would cease to believe in it and stop acting on it.'[282] Any features of morality which seem to contradict Ruse's theory are thus actually supporting it, for they can be said to have been developed in order to ensure that we never discover the truth about morality.[283] In his own words, 'Just as the Freudian argues that those who deny his or her explanation thereby confirm it, so the evolutionist argues that those who find his or her explanation implausible support the very point which is being made!'[284]

The problem with such a dictatorial, 'heads-I-win, tails-you-lose' strategy, is that it elevates beyond the bounds of falsifiability what is intended as a theory to be tested. If a theory includes some means of incorporating any opposition to itself, it has theoretically removed the possibility of being weighed for its merits and found wanting. Although wrong in any theory, the illegitimacy of such a strategy is especially obvious in the context of Ruse's naturalism. He claims that science is the proper realm within which to understand his meta-ethical theory, and that science necessarily requires the operations of 'adjusting, revising, rejecting', among others.[285] But, by using the argument above, Ruse is claiming that any attempt at rejection from the perspective of meta-ethics can be incorporated into his theory, and all such objections can therefore be disarmed. His

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[282]Ruse (1991), 507.

[283]This, of course, is shorthand for the actual mechanism: those proto-humans who were able to 'see through' the illusion would not be altruistic, whereas those who had ideas which caused them to be fooled by the illusion would be altruistic. Altruism being adaptive, those who could see through the illusion would tend to decrease in the population relative to the others.

[284]Ruse (1991), 508.

[285]Ruse (1995), 166.

theory, under such a conception, is invulnerable from the perspective of meta-ethics. To those who disagree with him about the nature of morality, he has stated: 'All I can say... is that their genes are deceiving them and, as usual, they are doing a good job.'[286] This negates any possible meta-ethical argument, but at the expense of his scientific world-view. In maintaining his theory as an invulnerable dogma, which can incorporate attempts at opposition, Ruse has transformed what he intended to be a scientific position into a matter of blind faith. Only by seriously considering meta-ethical arguments can a scientific theory of morality claim to have incorporated meta-ethics. Otherwise, it seems all too convenient, as well as question-begging, for a theorist to claim that all other meta-ethical theories but his own are parts of an elaborate illusion.

As a final note on the illusory nature of meta-ethics, the extent of this illusion must be emphasised. Ruse claims not only that certain genes control our thoughts in certain ways, but that they do so to such an extent and with such elaboration that moral philosophy can proceed for thousands of years within the illusion. This illusion is so complex and has such refinement and depth that hundreds of philosophers can spend their lives expounding on it. Ethics can be approached from the perspective of individual virtues, or from the perspective of an overarching idea. One can concentrate on a property such as goodness which could be attributed to concepts and objects apart from human actions, or on a property such as rightness which is centred on human action. One can discuss morality in terms of rules or consequences; describe its relation to aesthetics or metaphysics or religion; enlarge upon the meaning of moral terms and the function of moral language; and entertain various hypotheses as to the way in which we come to know, decide or distinguish in morality. Moral principles can be applied to the entire range of human endeavours, including

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[286] ibid., 291.

business, law, the environment, medicine, and technology. Ethics is an area which has seen an immense amount of reflection, introspection, and thought in at least the past few millenia. In order for Ruse's theory to be correct, the mechanism for producing such an illusion must be psychologically powerful enough to withstand all of this scrutiny, and the illusion itself must be so intricate and complex that moral philosophers can spend this much energy and time delving through it. Given these gargantuan requirements of the illusion, it seems as though such a theorist has a great responsibility to defend his idea against the history of moral philosophy which stands in opposition to it. This is especially so when, as is the case here, no mechanism nor empirical evidence has been presented for how such an illusion could have come into place or how extensive it is claimed to be.

iv. Comparison with moral experience

All of the claims against Ruse which were mentioned in the beginning of the last argument (iii) have the commonality of comparing the treatment of morality in his work to what the critics believe is properly considered morality. This comparison is reminiscent of G. E. Moore's Open Question Argument, where two terms such as 'good' and 'pleasure' are compared in order to discern whether they are the same concept. Ruse's theory is synthetic, however, and as such it is not liable to the types of criticism that could undermine a semantic theory. However, as was shown towards the end of the last chapter,[287] even synthetic theories have been criticised for ignoring what is considered by critics on the basis of moral experience to be the case. To take an extreme example, no one would take Ruse's theory seriously if he had claimed that morality was a physical object made of wood on which people sit. This is true regardless of whether the theory was defended on the basis of the meanings of words, or on the basis

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[287] II.D.3.

of scientific evidence. It might be said that experience, in a very broad sense, speaks too strongly and obviously in opposition to such a claim. Therefore, at least to some extent, this type of criticism of synthetic naturalism does have plausibility. The general question, then, is whether Ruse's characterisation of morality is close enough to experience to warrant consideration as an ethical theory, rather than just a theory of biological altruism or tendencies towards sociability, etc. Merely to state that morality is the same as tendencies towards sociability begs this question, which is no more justifiable than in the case of claiming morality to be the same thing as a chair.

The difficulty with such criticisms, however, is how to determine which of two experiences called 'morality' (the one criticised or the one underlying the critic's position) to accept as the truer account. If, as Ruse believes, there is a proper way to understand morality, and other ways are improper, the question remains as to how to adjudicate between two people's conceptions of it. A feature of synthetic naturalism, unlike semantic, is that one's theory does not have to accord with linguistic convention. In terms of the Open Question Argument, criticism of semantic naturalism could rest on what might be agreed upon as the 'ordinary language conception of morality', an *a priori* claim.[288] This would be taken as morality *A*. When criticising an ethical theory, say one that defines morality *B*, one could simply compare *A* and *B*. Insofar as they differ, the Open Question Argument suggests that *B* fails to account for all that is in *A*, and so is refuted as an analytical account of morality. With synthetic naturalism, however, there is no morality *A* that is considered an *a priori* foundation for such criticism. The synthetic naturalist, whether reductive or nonreductive of moral terms, claims that natural science points out a particular ethical

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[288]This, of course, is the ideal situation for analytical philosophers. In reality, things are not as clean: there are serious differences of opinion as to what the 'ordinary language' conception of morality includes. See II.C.4a.

theory, even if some serious moral philosophy is required to elucidate that ethical theory.

One way of assessing synthetically naturalistic theories is by a method analogous to the examination of semantic theories. The Open Question Argument relies on the relation between the meanings of a proposed ethical definition, and the actual meanings of moral terms. Likewise, we can rely in synthetic arguments on the relation between proposed and actual facts or states of affairs. In a way, this is what has been done all along in the critical half of this chapter. First, what Ruse claims to be the facts of science on which he bases his meta-ethic were challenged. Second, what is evidently Ruse's moral experience was compared and contrasted with what many others experience as morality.[289]

This second mode of critique requires some elaboration. As has already been discussed, there are several discrepancies between morality as Ruse portrays it, and other conceptions of morality held by people. For instance, according to Ruse's morality, certain significant groups such as the immoral and people who are unable to perform altruistic actions, are not morally considerable unless they are family members. Neither non-human entities nor one's own person are appropriate for inclusion in the realm of moral considerability either, except via other people. Prejudice against, perhaps even retaliation towards, certain individuals such as those that do not return kindness and those who forgive wrongdoing rather than hold grudges, is a necessary part of the scheme of morality. Morality, furthermore, is entirely a matter of emotional drives towards certain behaviours, with no possibility for rational discussion or resolution of disagreements. On the other hand, it is very possible, and actually very

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[289]In the following discussion, the term 'moral experience' will be used, and might be thought to imply that we have no choice as to the moral rules we live by. Although this is Ruse's position (Ruse (1989), 269; (1995), 252f), the use of this term is not intended to beg this question.

common, to find people espousing a view of morality which differs from Ruse's on all of these matters.

Take *P* to be a person who disagrees with Ruse on the nature of moral experience in all of the ways mentioned in the last paragraph. In order for *P* to have a reason to think his beliefs as to what morality is all about are an illusion, Ruse's view would have to present an interpretation of *P*'s own experience of morality, rather than that of some experience which is not *P*'s own, or of an experience which is not of morality. The examples above show that Ruse presents a theory that provides an interpretation of experiences *P* does not have (e.g., the experience of finding objective guidelines to adhere only to the relationships between reciprocating members of a society), and so *P* has no reason to take such things as having anything to do with morality. Also, Ruse's theory provides an interpretation of experiences *P* has, but not what *P* would consider *moral* experiences (e.g., the desire to hold grudges against those who do not return kindness), and so *P* has no reason to take those experiences or their interpretation as pertaining to morality either. The lack of reason in both of these cases stems from the fact of *P*'s experience, something which is not adequately reflected in the theory Ruse presents.

This does not mean that any ethical theory *P* might produce is the correct one. *P* could be misinterpreting his experience of morality. *P* could be misunderstanding its significance. As Ruse suggests, *P* could even be living an illusion with respect to it. However, the only way in which *P* could have any reason for believing this, is for a theory to start out by presenting a picture of morality which accords with *P's own experience*. If Ruse's theory presents a picture of something which does not look much like what *P* experience as morality, *P* has no reason to believe that what Ruse is talking about is morality. Therefore, even if a theory is entirely internally consistent, it can still be rejected as an ethical theory if it presents a view of

morality which does not coincide at the level of basic experience with that which one finds morality to be about. In fact one must, on pain of self-contradiction, reject that theory, or else deny one's experience. This mode of critique is analogous to arguments provided against previous levels of naturalism. Just as Hume's Law claims logical naturalism to represent incorrectly the conventions of logic as many people accept them; and just as the 'naturalistic fallacy' claims semantic naturalism to have used language that fits ill with many people's views of the meanings of words; likewise the present argument is that Michael Ruse's synthetic naturalist theory achieves its ends only by representing moral experience in a way which does not resemble that of many people.

One might suggest that this argumentation is unfair to Ruse, who might be postulating a *correct* view of morality, rather than the view which everyone holds now. It may be that all of those people whose experience is incongruent with Ruse's description of it are simply wrong. This might be a worthy defence of other views, but not that of Ruse. The reason is that Ruse is attempting a *descriptive* account of morality. He is not preaching to us as to what we ought to take as morally right and wrong. He is claiming that we already do have views of right and wrong, and he is explaining, with sociobiology, why we believe the way we do. We hold our genes in common, and so we should hold our moral experience in common, for our moral experience (Ruse claims) flows from our genetic code. Any discord between Ruse and others as to the nature of moral experience is a piece of evidence against the notion that Ruse's theory is an description and explanation of human moral experience. He is definitely describing *something*, but whether that something is morality depends on what one takes morality to be. If, as Ruse believes, we have no choice about our moral experience because it is part of our biology, then his theory is false because it fails to describe adequately certain aspects of what people do

indeed experience as part of morality. If, on the other hand, we are unconstrained by our biology enough to have some ability to choose our moral precepts, then there is no assurance that we will happen to choose moral precepts in line with the theory Ruse presents. Therefore, whether one is a determinist about moral experience does not matter: Ruse's theory does not work either way.

E. Conclusions

Synthetically naturalistic ethical theories describe morality within the confines of what science says about the world. In order to be able to assess the merits of such theories, one must attend to both the science and the moral philosophy which are involved. Attention to science is required in order to determine whether the factual claims that are the foundation for the theory are both accurate and adequate. Attention to moral philosophy is required to the extent that the ethical theory makes descriptive claims regarding the nature of moral experience or the way in which people regard morality. In this chapter such attention was given to the science and moral philosophy involved in one such ethical theory: Michael Ruse's 'evolutionary naturalism'.

An examination of the scientific basis for Ruse's claims provides great insight into both their accuracy and their adequacy. Evolutionary biology, particularly as combined with modern genetical theory, has provided a solid foundation for the more recent discipline of sociobiology. Sociobiology is in some sense a particular application of evolutionary theory, but it breaks new ground and therefore encounters new problems. Certain empirical matters have not been definitively settled in the young science even apart from human morality, although some are basic

assumptions necessary to its practice. Examples of these assumptions are: the continuity between nonhumans and humans such that empirical evidence gathered primarily from the latter can be applied to the former; the insignificance of both culture and choice relative to the genes in shaping psychological/behavioural traits; the existence of answers in terms of adaptive value to questions of how traits have become widespread in a population; and the relative insignificance of group selection except in special circumstances which are ultimately based on conventional natural selection facilitated by the replication of genetic information. These assumptions have varying degrees of empirical support at the present time, and all have been subjects of varying degrees of debate in recent years. If, as has been granted for the sake of this chapter's argument, these assumptions are correct to a sufficient extent for sociobiology to be a workable discipline, such evolutionary explanations of biological altruism as kin selection, reciprocation, and manipulation are appropriate and well-supported.

More significant problems arise as such information regarding biological altruism is applied to human morality, as is attempted in Ruse's works. Ruse's claims that his position is an *empirical* one are inconsistent with the actual way in which he presents and defends his theory. The only empirical evidence provided is that which supports biological or effective altruism. However, connections between effective and intentional altruism, and between intentional altruism and morality, are also made. As to the truth of these connections there are reasons for serious doubt. First, in order for a connection between effective and intentional altruism to be maintained, intentional altruism itself must produce behavioural effects in line with effective altruism. There are significant barriers to this, however. Not only do effects often fail to square with our intentions, but intentional altruism continues to operate outside of the crucial boundaries which are in place

with respect to biological altruism. Outside of those boundaries, intentional altruism is significantly maladaptive. Intentional altruism as a whole, then, is doubtful as an adaptive strategy. Second, in order for the connection to morality to be made, the psychological illusion of objective guidelines must be an efficient and adaptive means of producing behaviour in line with effective altruism. Ruse does not recognise the existence of a broad range of alternatives. These are simpler, and are actually found in nature, as opposed to the idea of illusory objective guidelines which would be extremely psychologically complicated, is not found in any other aspect of human or other animal existence, and is entirely speculative. The support that is provided for the hallucinatory mechanism for altruism is the peculiarly non-self-regarding nature of altruism, but this claim confuses effective altruism with intentional altruism. We are disposed to be 'altruistic' in certain ways, according to sociobiology, in the same way and for the same reason that we are disposed to be 'selfish' in other ways. Both tend to contribute to the persistence of one's own genetic information. There is no peculiarity of altruism, then, that should require an outlandish mechanism to assure that behaviour. There are also internal problems with the idea that illusory objective guidelines could be adaptive, such as the 'situation-action' time lag due to the reflection and deliberation that is required in order to make moral decisions, and the fact that objective guidelines often fail to produce behaviours. Therefore, not only is there not a valid connection between effective altruism and intentional altruism, but Ruse's idea of illusory objective guidelines is not a plausible biological hypothesis as to the way in which altruistic behaviour could be assured.

In addition, Ruse's secondary argument, regarding the contingency of morality on the evolutionary process, fails to establish his conclusion that morality cannot be truly objective. His argument depends on at least two assumptions: that there is no adaptive value to a genuinely objective

morality, and that something with no adaptive value would not become actualised in human psychology. Ruse's own theory seems to undermine the first assumption, but even if it is true the second assumption is an abuse of evolutionary theory. There is no warrant for the claim that something cannot exist if it is not adaptive.

There are also arguments from the perspective of moral philosophy which tell against Ruse's theory. Since Ruse is claiming to provide a descriptive account of the moral guidelines which humans do have, any significant discrepancies between his theory and the moral beliefs of people is evidence against the idea that what Ruse is describing can be considered morality. In fact, many such discrepancies are found. For instance, few would claim that it is moral to withhold moral considerability from those who do not exhibit altruistic behaviour themselves, either by their own choice or for one of many reasons not in their control. On Ruse's theory, however, such exclusivity must be a vital aspect of morality if it is to be a vehicle for effective altruism. On Ruse's theory the identity of the individual in a situation is of vital importance; but in morality it tends not to be. This same argument can be repeated with respect to nonhuman entities, and even oneself. With regard to the latter, the history of moral philosophy is replete with discussion of the relevance of duties to oneself. In fact, many significant theories present this as the root of all morality. Ruse, in order for his theory to be sound, must deny the fact that people do have such moral beliefs. Other normative discrepancies between Ruse's ethical theory and the moral experience of many people are found in the particular types of actions which are or could be sanctioned from the perspective of effective altruism. All of these arguments show that as a description of the moral guidelines embraced by people, Ruse's theory rules out many things which are widely regarded as moral principles, and claims many things to be morally obligatory or permissible which are widely regarded as immoral.

At the meta-ethical level, Ruse's theory raises important issues which are not adequately dealt with. First, his argument for the contingency of moral principles is based on an extraordinary and radical conception of the objectivity people ascribe to normative moral guidelines. Second, necessary to his theory is a strict emotivism whereon moral guidelines are perceived as sentiments and acted upon because of their force. Ruse does not argue cogently for this extreme and controversial position. Actually, he argues in a circle, as the position plays a role in both the 'empirical' basis for and the meta-ethical conclusion of his theory. The illusory nature of objective moral guidelines is a foregone conclusion, therefore, given his initial assumptions. Third, central to Ruse's theory is that meta-ethics as a discipline is wrongheaded because it deals with the nature of moral guidelines, which themselves are hallucinations. Ruse thus presents his own meta-ethical theory as the only undeceived meta-ethical theory as a matter of assumption, and by so doing has incorporated into his theory the instant refutation of all other meta-ethics. This begs the question, and raises Ruse's theory beyond the bounds of rational argument. Any possible moral philosophical problems with his theory can simply be considered by him as part of the illusion of morality (if it is contrary) or as part of the reality of it (if it is advantageous). Fourth, and building on the previous arguments, Ruse's theory of morality is at its root a matter of describing what people do consider to be morality. This is the content of the illusion which he claims to be widespread since it is rooted in the genetic information of humans. However, what Ruse has characterised as the illusion is so different from what many people actually consider morality to be about, that there seems no reason to consider what he describes to be *morality*.

These lines of argument, both the scientific and the moral philosophical, show there to be fundamental problems with Ruse's theory. As a whole, the connections that are made between effective altruism,

intentional altruism, and human morality are not supported by empirical evidence, but on the contrary are very dubious. The incongruencies between effective and intentional altruism, the unlikelihood of objective guidelines being the vehicle for the former, and the unsoundness of the arguments in support of these points, render this sociobiological account of morality highly implausible. Moreover, the differences between the moralities embraced by people and the picture provided by Ruse's theory are so great that one must conclude that which is described in the theory not to be morality. This is true at the normative level, where people's beliefs diverge widely from that which they would have to be in order for Ruse's theory to be true. It is also true at the meta-ethical level, where problems raised with Ruse's theory are overcome only by begging the question or misrepresenting the nature of the moral beliefs held by people.

The sociobiological thesis which formed the empirical basis for Ruse's moral philosophy was simply that there are good evolutionary reasons for humans and other social animals to behave in certain ways which do not directly benefit themselves. One reason for this is the incongruency between the set of actions that promote the persistence of one's genes and the set of those that promote one's own individual welfare. Another reason for this is that certain actions can benefit oneself in the long run even though they are a net disadvantage immediately. Perhaps this sociobiological information can explain why we are psychologically motivated to care for our young, to help our relatives, and to co-operate in society. Sociobiology can perhaps provide an explanation as to why being kind to those who are kind to us is not generally difficult, whereas being kind to those who are indifferent or hostile to us usually is. Sociobiology gives some content to the idea that it is 'natural' to be more caring towards one's own family and community than to those far away. It may provide a biological explanation as to why such things as patriotism, xenophobia, cliques, *esprit de corps*,

nepotism, concern for reputation, friendship, and loyalty are prevalent aspects of our society. It may explain why people so easily hate hypocrites and traitors, and why those who repay evil with kindness are often branded as spineless or feebleminded. Sociobiology may provide an explanation why we have a *psychological tendency* towards these things; but there seems no reason at all to suspect that this psychological tendency is what our *morality* consists in. Many of those things can be morally right or at least permissible, whereas many others be morally wrong. Psychological tendency may tell us what comes easy (probabilistically speaking), and so we may now begin to understand why some things are so easily done whereas others are so difficult. To confuse this with morality, however, is to claim that whatever comes easy, or whatever one has a psychological tendency to do, must be right. Perhaps some hold this position; but surely it should not be foisted upon us as having any basis in science.

A question left open for discussion at this point is whether there is a theme in this critique that can be developed into a more generally applicable argument relative to synthetic naturalism. To provide an answer to this question is the project of the next and final chapter.

Chapter IV: SYNTHETIC NATURALISM AND THE ARGUMENT FROM MORAL EXPERIENCE

Synthetic naturalists attempt an experientially based, *a posteriori* account of morality and its significance. With a few exceptions,[1] this is the point to which naturalism in ethics has come at the end of the twentieth century.[2] Naturalistic moral philosophy has been urged in this direction by repeated criticisms of other types of naturalism which relied more heavily on the structure of logic and language.[3] Like any other philosophical theories, synthetically naturalistic theories are subject to scrutiny to determine whether they are internally consistent and do not contradict any known facts. Like any other naturalistic ethical theories, they are subject to examination as to their adherence to the dogma of naturalism: that only principles, properties or terms that are accessible to science can be employed. A peculiarity of *synthetic* naturalist theories, however, is the fact that they claim not to take an *a priori* approach to understanding what morality and moral concepts are. This means that statements asserting fundamental truths about morality are not self-evidently true, nor do they gain their justification from the fact that they follow logically from or are analytically equivalent to other kinds of true statements. According to the synthetic naturalist, in order to describe the nature of morality one can and must appeal to experience,

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[1] See II.C.4b.
[2] See II.C.4c, D.1-2.
[3] For those other types of naturalism, see I.B.1-2. For the criticisms, see II.B-C. For how a synthetic approach is thought to overcome them, see II.C.5.

with the constraint that all principles, properties and terms involved are appropriate for use in scientific explanations.

As was shown in the critique of Michael Ruse's evolutionary naturalism in the last chapter, however, there can be significant disparity between the descriptions of the nature of morality provided by a synthetic naturalist theory, and the nature of morality as it is often held by people. To what extent this is problematic, and what (if anything) this means for naturalism, will be the focus of discussion in this chapter.

A. The Argument from Moral Experience

1. SYNTHETIC NATURALISTS AND COMMONALITIES IN MORAL EXPERIENCE

a. *Causal theories of reference: looking to moral speakers for the meanings of moral words*

Aside from reliance on the *a posteriori* rather than the *a priori*, critical commentators Terence Horgan and Mark Timmons have identified five other distinctive features of the synthetic approach to naturalism.[4] Four of these have already been discussed to varying extents in this thesis. One is the synthetic naturalist's reliance on the fact that a single entity can be represented or referred to with two terms which are not synonymous.[5] A second is the distinction made between reductive and nonreductive forms of naturalism.[6] A third is the claim first defended by Saul Kripke and Hilary Putnam that some *a posteriori* assertions can be true necessarily, in the sense

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[4]Horgan and Timmons (1991), 450-2.
[5]See I.C.3, II.C.5, D.1.
[6]See I.B.3, II.D.2.

that they are true 'in all logically possible worlds'.[7] Fourth is the view, based on recent developments in the philosophy of mind, that some properties (moral properties in this case) might be 'functional' properties in the same way that the mind is said by some philosophers to be a 'function' of the body.[8] As has been shown in the relevant sections, not all synthetic naturalists utilise all of these claims; however, all of these claims are distinctive to synthetic naturalism and are not used in support of logical or semantic naturalism.

One final distinctive feature of synthetic naturalism discussed by Horgan and Timmons has not yet been discussed explicitly in this thesis. They discuss a particular approach to understanding how terms in languages refer to entities, an approach embodied in 'causal theories of reference'. This import from Kripke's philosophy of language[9] is encapsulated by Horgan and Timmons with the description that with respect to certain types of terms (moral terms in this case), their 'reference is "grounded" by relevant causal hookups between speakers and the world'.[10] A degree of clarification of the nature of these 'causal hookups' is provided by Kripke himself:

> 'In general, our reference depends not just on what we think ourselves, but on other people in the community, the history of how the name reached one, and things like that. It is by following such a history that one gets to the reference.'[11]

So, according to causal theories of reference, certain entities in the world are responsible for causing a term to be used by any given speaker in a certain way. Although these entities include the actual referent itself, predominantly these entities are comprised of other people who use that term. As stated in one discussion of this type of theory, 'a speaker within a

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[7]See I.B.2a. The seminal works referred to are Kripke (1972) and Putnam (1975). Kripke (1980) and Horgan and Timmons (1991) explore some of the implications of this point.
[8]See II.D.2.
[9]Kripke (1971), (1972).
[10]Horgan and Timmons (1991), 452.
[11]Kripke (1971), 79.

language speaking group can trace his use of the term back to the referent of the term by virtue of his connection with other speakers of the language'.[12] Furthermore, causal theories of reference emphasise that they do *not* 'depend upon what an individual or group thinks a term refers to, but on the shared reference accepted by the whole community of speakers of a language that uses it to refer to something.'[13]

Horgan and Timmons describe the pervasiveness of this approach among synthetic naturalists, and explain how particular synthetic naturalists defend and utilise it. In the course of this discussion, the pioneering synthetic naturalist Richard Boyd is recognised by these commentators as one of the most explicit defenders of such a view. In Boyd's own words, 'The reference of a term is established by causal connections of the right sort between the use of the term and (instances of) its referent'.[14] The point here, and the relation to synthetic naturalism, is that a replacement for analytical semantics has been sought by synthetic naturalists in order to organise and provide meanings for our moral terms, and the most significant replacement to date[15] has relied on these 'causal hookups between speakers and the world'. Furthermore, as the above passages show, these causal hookups are rooted in *how people do in fact use those terms*. Kripke's primary indication for determining the reference of terms, again, was 'other people in the community'.[16] More specifically, the proper reference of a term is 'the shared reference accepted by the whole community of speakers'.[17] One straightforward implication of this new approach to semantics is that although synthetic naturalists do not justify their ethical

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[12]Powers (1992), 460.
[13]ibid., 461.
[14]Boyd (1988), 195.
[15]The causal theory of reference is significant enough for Horgan and Timmons, in the review portion of their aforementioned article, to describe it alone as *the* replacement for analytical semantics in the new wave of naturalism.
[16]Kripke (1971), 79.
[17]Powers (1992), 461.

theories on the basis of the meanings of words, they do not ignore semantics altogether. They do recognise that terms must have senses and referents in order for communication with words to be at all possible. Moreover, any synthetic naturalist, since *a priori* definitions for moral terms are not acceptable,[18] must look somewhere other than analytical semantics to find a basis on which to organise our moral language and thereby understand each other when we refer to moral properties, states of mind, ideas, *et cetera*. Horgan and Timmons claim that in this search for a basis of reference for moral terms, synthetic naturalists must rely on how people actually use the relevant terms. This view is explicitly defended by Boyd.[19] This particular feature, inherent in at least many notable varieties of synthetic naturalism, is very similar to a certain feature in Ruse's theory which facilitated a great deal of the criticisms offered in the last chapter.

b. *Rusean ethics: looking to moral agents for the nature of morality*

In the last chapter, most of the critique of Ruse's theory from the ethical perspective included a comparison of the stated or unstated implications of Ruse's theory with common conceptions of morality held by moral teachers, philosophers and people.[20] In many cases the suggestion was made that there is a significant disparity between the way Ruse portrays human morality as people experience it, and the way many people do in fact find morality to be. This type of criticism of Ruse is valid because Ruse's theory rests on a particular description of what people do, as a matter of fact, find morality to be like.[21] In accordance with this, he says that he knows no other way for people really to understand (and agree with) his characterisation of moral experience than for them to 'examine themselves

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[18]Boyd (1988), 196; Ruse (1995), 2.
[19]Boyd (1988), 195.
[20]See III.D.2c.iv, which follows upon work done thoughout III.D.2.
[21]See III.D.2c.iv, esp. last paragraph.

deeply and carefully'.[22] Therefore, for a defence of his thesis Ruse appeals to what he believes to be commonalities in the way people experience morality. Accordingly, many of the criticisms of Ruse in the last chapter are illustrations of the lack of certain commonalities which would (if they existed) have lent plausibility to his case.[23]

c. *The connection: reliance on commonalities*

Ruse discusses commonalities most often in terms of what people find morality to be like on the level of what might be called moral experience. For example, he talks of the 'sense of "right" and the corresponding sense of "wrong"',[24] the 'logically odd sense of oughtness',[25] and the level of human experience of morality on which there is 'universality and common acceptance of moral norms across *Homo sapiens*'.[26] Horgan, Timmons and Boyd, however, talk more often in terms of moral language, as has already been shown. Nevertheless, Ruse does believe that corresponding with our distinctive moral experience there is a 'difference between the language of ethics and the language of other aspects of the human life'.[27] And, although Horgan and Timmons refrain from extensive comment on the connection between moral language and any particular experience, they do suggest that, at least from the perspective of synthetic naturalism, 'differences in causal regulation' between humans and some other (mythical) type of moral creature, and thus differences in the meanings of moral words, would be 'due at least in part to... differences in psychological temperament'.[28] In other words, a distinctively non-human

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[22]Ruse (1991), 505.
[23]See III.D.2.
[24]Ruse and Wilson (1986), 426.
[25]Ruse (1995), 245.
[26]Ruse (1985a), 233.
[27]Ruse (1995), 257. Ruse does not delve into the particulars of how he sees moral language and moral experience interrelate, however. See III.C.3.
[28]Horgan and Timmons (1991), 465. They are careful to point out that even if this is the case, it is doubtful that only one psychological feature is relevant.

psychological experience as regards morality would very probably cause the mythical creatures' moral language as well to be different from ours. Boyd too relates his moral theory ultimately to human experience by tying what we believe about morality at a very basic level to various kinds of experiences of need.[29]

So, although there is variation in the ways synthetic naturalists refer to the commonalities among moral beings upon which their theories depend (some discussing things more often in terms of language and others more often in terms of experience), a clear connection between Ruse's theory and those of many other synthetic naturalists is a reliance on such commonalities. If Ruse were to withdraw his commitment to such commonalities, he would no longer have a basis on which to defend his meta-ethical theory, for his theory arises precisely out of the way in which morality is held by him to be experienced by people. He would then have to offer his meta-ethic only to those people, if any exist, who share his experience of morality, rather than as the one general truth of the matter for all moral subjects. Likewise, if synthetic naturalists like Boyd were to withdraw their commitment to such commonalities, they would be opening the door to an indefinite number of ways in which morality could be experienced, and therefore an indefinite number of ways in which moral terms could be used. This would mean that no particular reference for any given moral term could be established, and so their task of replacing the disfavoured analytical semantics would have failed. So, this connection among synthetic naturalists is a strong one, and therefore provides a worthwhile focus for critical examination.

Since on some common views-- as the citations from Ruse, Boyd, and Horgan and Timmons in the beginning of this subsection attest-- moral

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[29]Boyd (1988), 204.

experience is logically prior to the language we use to represent it,[30] hereafter discussion will be in terms of moral experience (how we find morality to be) rather than moral language (how we talk morally or talk about morality). However, for those of a contrary view, the discussion can be reinterpreted in terms of moral language just as sensibly. The fact that there is this connection between Ruse's theory and other synthetic naturalist theories, together with the fact that it was this particular feature of Ruse's theory which facilitated much of the last chapter's critique, opens the possibility that the strategy of critique which featured in that chapter can be generalised for use with respect to other synthetic naturalist theories.

2. FOCUSING CRITIQUE OF SYNTHETIC NATURALISM ON ITS CLAIMS OF COMMONALITIES AMONG MORAL AGENTS

a. *General form of the argument*

It may be the case that there are other ways for synthetic naturalists to determine the meaning of moral terms besides what Horgan and Timmons have called the 'causal regulation theory', which relies heavily on commonalities among moral beings. Or, if this theory of semantics is not used, there may be a way in which to lend plausibility to a synthetic naturalist theory that does not rely on commonalities in the moral experience of people. However, to judge from two separate reviews of meta-ethical theories (one by Darwall, Gibbard and Railton and another by Horgan and

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[30]However, it is not necessarily *chronologically* prior: any given person might learn and use the language of morality before, or even in the continuing absence of, ever having the experience. By *logical* priority here is meant that on some common views, a statement regarding moral experience does not logically presume a statement regarding moral language; whilst a statement regarding moral language often presumes one or more statements regarding moral experience. Any controversy which might arise at this point does not compromise the present argument, however, but merely affects the decision as to which terms to use in its presentation. The argument must be made in terms of either moral experience or moral language, and the former has been chosen here; but the point would be the same either way.

Timmons), the leaders of naturalism in the post-analytic scene are philosophers such as David Brink, Richard Boyd, Peter Railton, Gilbert Harman, Simon Blackburn, and Richard Brandt.[31] Each of these do make claims which exhibit dependence on such commonalities.[32,33] It is in the context of the many theories with such a reliance on commonalities among moral agents that this discussion continues.

The final argument of the last chapter suggested that although Michael Ruse's evolutionary approach to synthetic naturalism describes an experience which he claims is fundamental to morality and common to humanity, there are several reasons to believe that this contradicts many people's experience of morality. This being the case, those whose moral experience differs widely from Ruse's characterisation are not likely to see any plausibility in equating the description Ruse provides with morality.[34] This sheds doubt on the possibility that what Ruse portrays is actually fundamental to morality and common to humanity as he says. But, as has been shown in the last section, Ruse is by no means alone among synthetic naturalists in his significant reliance on supposed commonalities in moral experience. A general and simplified statement of an argument applicable in any such case is:

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[31]Horgan and Timmons (1991) discuss only Boyd and Brink; Darwall, Gibbard and Railton (1992) describe all of the above.

[32]Evidence of this is widespread, e.g. Harman (1975); Blackburn (1987), 55; Railton (1995a), 268-75; Brandt (1996), 201. For examples of particular claims that are stated as commonalities in moral experience, see, e.g. Blackburn (1984), 188 on the moral state of mind being an attitude; Brink (1986), 37 on the kind of emotive force that attaches to moral judgments; Boyd (1988), 184-5, 204-16 on the similarity between moral beliefs/methods and scientific beliefs/methods.

[33]To what extent one's dependence on commonalities of moral experience is important to one's claims must be shown in each particular case, as was done very briefly with respect to Ruse and Boyd in the two parts of the last subsection; the importance of this will be discussed towards the end of this subsection.

[34]In Ruse's case, moral experience is claimed to be a set of felt rules in accordance with effective altruism, rules which are accompanied by senses of prescriptivity, universality, and nonsubjectivity. These are intended as descriptions of human experience of morality. If moral rules are not 'felt' by one in the way Ruse describes, or if the particular rules felt are not in accordance with Ruse's claims, then the Argument from Moral Experience may be employed against that theory.

Insofar as any theory exhibits a reliance on supposed commonalities in the moral experience of moral agents, and insofar as the views of moral agents contradict this, such a situation renders the particular theory implausible.

This is the thrust of what might be called an Argument from Moral Experience. That it is a gross simplification of an argument can be illustrated by means of four different types of counterargument, any of which the synthetic naturalist can employ when accused of falsely supposing certain things to be common elements of the human experience of morality.

1. Synthetic naturalism relies on the findings of science; and since these are incomplete at any one time, so must the theory be. Any false characterisation of morality may be corrected by future advancements, just as inconsistencies between a scientific theory and experience can be corrected by advancements in scientific theory.

2. There is no guarantee that any given moral agent will be of sufficient (a) mental capacity and (b) moral maturity or aptitude, to dissent properly from the theory offered by the synthetic naturalist.

3. The first 'insofar' in the above encapsulation of the argument is vague. There would have to be a standard set up by which one can measure the degree of reliance which a theory has on the commonalities it supposes to exist among people.

4. The second 'insofar' is also vague. There would have to be a standard set up by which the degree of dissent from a particular supposed commonality can be properly evaluated.

Responding to these four kinds of counterargument will create a more precise picture of the form an Argument from Moral Experience takes. Rather than seeking to undermine the logic of the argument, each of these counterarguments serves to remove pressure that the argument would otherwise place on the synthetic naturalist. The first does this by looking to a greater body of knowledge than was originally offered by the naturalist. The second looks to the possibility of the dissenter being incapable of making the argument properly. The third and fourth look to the difficulty of the different kinds of quantification necessary for the argument to yield a specific result.

The first counterargument places a certain constraint on the Argument from Moral Experience: namely, that the argument restrict itself to the theory *as currently proposed.* The synthetic naturalist can argue that because of the unpredictable nature of scientific enquiry,[35] a critic of an ethical theory that is based on scientific enquiry cannot look into the future and claim that under no conditions could an advancement ever be reached which would resolve present appearances of inconsistency. But, on the other hand, neither can the synthetic naturalist look into the future and claim that such an advancement will indeed be reached. If the naturalist's response to a critic is that the currently proposed theory does not provide all the explanation necessary to understand the matter fully, the synthetic naturalist has the responsibility to provide the rest of the explanation, or else admit a step of faith. When and if further information arrives, 'the theory as currently proposed' changes, and so the critic must re-evaluate the new theory. Otherwise, if no changes are made to the inconsistent theory, the original criticism stands. So, the first objection to the Argument from Moral Experience is met with the condition that any particular criticism of an

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[35]See Medawar (1984), essay #2, entitled 'Can Scientific Discovery be Premeditated?'.

ethical theory is explicitly admitted to affect the relevant theory only as it is currently presented.

The second counterargument ostensibly creates a greater problem for the critic. Since the Argument from Moral Experience ultimately depends on the mental and moral aptitude of moral agents (because they find morality to be different than what is claimed by the theory in question), there is a chance that a dissenting argument might proceed not from a true difference of experience of morality, but rather from an insufficient aptitude in one or both of these areas. The problem with using this argument against a critic, however, is that once the subject of insufficient aptitude is broached, the same problem of quantification which the naturalist has raised in relation to other issues for the critic (see counterarguments 3 and 4) arises here for the naturalist. The question becomes: How are mental aptitude and moral aptitude measured? Biologist Stephen Jay Gould has documented some of this century's failed attempts at quantifying mental aptitude, and he suggests that the prospect is no more promising today.[36] Even if Gould is wrong, and some reasonably accurate measure of mental aptitude is either available today or will be in the near future, this does not preclude criticism of naturalistic theories on the basis of moral experience. Rather, this standard of mental capacity measurement would serve as another dimension which must be taken into account in both the presentation *and* critique of ethical theories. The naturalist cannot put forth an ethical theory as if to a community of approximate mental equals if there are relevant mental differences that can affect the understanding of morality and moral theories. In short, if the naturalist argues that a particular critic is mentally incompetent, support must be provided for this in the form of a process through which that assertion can be demonstrated or otherwise defended. This must include, among other things, a description of the types of mental

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[36]S. Gould (1981).

incompetence which are relevant and the particular way in which critics might fall short. Otherwise, the naturalist's accusation of a critic's mental ineptitude is not a valid philosophical criticism because there is no way in which it can be scrutinised or evaluated.

With respect to moral aptitude the situation is even more complicated than in the case of mental aptitude, for in addition to the requirement of defence and quantification placed on the naturalist, many standards by which moral aptitude might be judged will be prejudiced in favour of one or another ethical theory. For instance, to judge moral aptitude on the basis of the content of one's genetic code may be appropriate if Michael Ruse's theory is correct, but not if it is incorrect. To judge it on the basis of one's degree of adherence to societal norms may be appropriate if a particular sort of culture-based morality is correct,[37] but not if the nature of morality is otherwise. So, to raise the issue of the possibility of a critic's moral incompetence will be begging the question unless a standard can be arrived at which does not prejudge matters of controversy in ethics. Since this essentially involves looking for matters of commonality among moral agents, which is precisely the matter at issue with the Argument from Moral Experience, one must avoid a vicious circle which can develop: the critic raises questions regarding the commonality of certain features supposed by a naturalistic theory, the naturalist in turn raises questions of the critic's aptitude on the basis of a particular standard, and the critic raises further questions regarding the commonality of the features underlying that standard, and so on. If the naturalist brings up the possibility of a critic being of insufficient moral aptitude, it is the naturalist's responsibility to defend this point, which will not be a simple matter on account of the high probability of controversial meta-ethical assumptions underlying any such

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[37]Specifically, the kind of theory which proposes that *x* is good or right if it conforms to the norms of a given society *s*.

position. Therefore, the second counterargument against the Argument from Moral Experience, while certainly posing worthwhile questions, creates problems that are at least as significant for the naturalist as they are for the critic. Indeed, only after the naturalist provides a set of criteria for mental and/or moral competence, and defends his accusation of a critic in terms of those criteria, can a critic understand or respond to such an accusation.

The third objection to the Argument from Moral Experience calls for a quantification of the degree to which a theory depends on its claims regarding commonalities among moral agents. This objection, like the first, can be met by placing a limit on what can be said by the critic. In order for the Argument from Moral Experience to present a worthwhile criticism, it must be accompanied by a demonstration of what elements of the theory are threatened by the falsity of the supposed commonality. In some cases these elements may be unnecessary to what the theorist sees as the core of the theory, and can be discarded if found to imply false conclusions. In other cases, these elements may actually be at the centre of the theory, in which case the theory must undergo more extensive revision or else be abandoned. This stipulation, however, is essentially the same as in any programme of argument-- critique-- rebuttal, and poses no new problems for the Argument from Moral Experience as long as arguments presented are accompanied by a demonstration of the aspects of the criticised theory which have implied the false commonality. This is the quantification requested by the third objection, and provided that it is included, this objection is met.

For an example of the demonstration required here, one can take the criticism of Michael Ruse's ethical theory in the last chapter. Ruse's theory was broken down in that chapter into four classes of several elements each, such that criticisms could be precisely attached to the respective elements of the theory. First, presuppositions of sociobiology were described;[38]

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[38]III.B.1.a-d.

second, the particular version of the naturalist paradigm Ruse adheres to was outlined;[39] third, the logical progression by which he makes his claim was separated into four premises and a conclusion;[40] and fourth, implications were drawn from certain premises and described in their own right.[41] Criticisms were delivered to Ruse's theory in the context of these particular elements. Because of this, those elements of his theory which are called into question by the criticisms offered in that chapter can be clearly seen, and so this does away with the imprecision which otherwise would bring about an objection on the naturalist's part.

The fourth and last predicted counterargument to the Argument from Moral Experience as phrased generally is a call for quantification of a second variable, (the first being the degree of dependence of a theory on the commonalities it implies). The second variable is the degree to which moral agents disagree with the supposed commonality. The question the naturalist might pose is this: Does one dissenting voice render a theory untenable, or is there some percentage (and what is it?) of humanity that can dissent and yet allow a theory still to maintain a level of plausibility? In raising this question the naturalist seeks to provide some room within which to manoeuvre in a situation where a supposed commonality has some degree of real or apparent exception. Technically, the answer to this question is that the Argument from Moral Experience permits no unresolved dissent at all. If the representation of morality by the naturalist is such that a certain commonality is relied upon, then the existence of any dissenter *A* means that, strictly speaking, such is not a commonality. This having been said, it is by no means the end of discussion for *A* to dissent. As a naturalist would undoubtedly be quick to point out, there are more contingencies than mental or moral incompetence that could result in an inconsistency of any given

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[39] III.C.2.
[40] III.C.3.
[41] From premise 3, III.D.1b-c, 2.b-c; from premise 4, III.D.1d.

person's view with the theoretical prediction. For examples, a communication breakdown, lack of information, misunderstanding, insufficient introspection, and perhaps even one's ulterior psychology could be responsible for the disparity. A way in which to discover and remedy these or other possible contingencies is through thought and rational discussion. Discussion directly aids communication and information and may correct a misunderstanding. Together with thought, it may also promote the necessary introspection and dispel extraneous prejudices which can produce dissent which is in principle resolvable. Differences which persist after rational discussion, or in situations where (if such can be shown) no limiting factor affects the understanding of the critic, are to that extent still *unresolved.*[42] Any unresolved inconsistencies between the moral experience of a dissenter and the prediction of a naturalist theory tell against the theory, because the theory involves a claim to commonality as part of its basis.[43] Hence, a complicated programme of quantification of dissent is not necessary in order for the Argument from Moral Experience to be effective in pointing out faults in a theory. What *is* necessary, is attention to any reasoned dissent, and the continuing attempt to resolve it. If this is the way in which moral philosophy is practised, then an obstacle to the Argument from Moral Experience is removed, and the fourth objection to it no longer stands.

This resolution of the fourth potential objection to the Argument from Moral Experience can be viewed in the same way that Darwall, Gibbard and Railton recommended similar objections to the Open Question Argument be resolved. They claimed that the Open Question Argument

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[42]As with any description of an argument, its success assumes that the dissenter is being honest and open-minded, which of course may not be the case in practicality.

[43]Whether the theory should be abandoned because of that counter-evidence, even if the faults are serious (quantification of which is described in the last two paragraphs) is another question, which requires an enquiry into whether another theory or possible revision exists which does not experience such problems.

should be recognised as a serious criticism whenever it was presented within certain conditions, and so no quantification of the percentage of the population dissenting is needed or even helpful; but, at the same time, the Open Question Argument should be seen in any particular case as an argument whose surety requires continuing discussion.[44] The present argument, in the same vein, is that the fourth objection to the Argument from Moral Experience is met, as corresponding objections to the Open Question Argument were, if the argument is not viewed in a misleading fashion. It is neither dependent for its validity on the number of people presenting it, but nor is it a weapon to be used once and for all with utter conviction in any particular instance. It is a tool which can be applied by even a single dissenter, but must be continually applied and tested by attempting to resolve the dissent rationally.

In summary, all of the four counterarguments to the simplified statement of the Argument from Moral Experience are helpful to an understanding of the particular boundaries and conditions within which the argument can properly operate, without undermining its validity in general. The first objection the naturalist might offer is met by assuring that the argument is claimed to be relevant only to the theory in its current form and complexity, and does not make any statements regarding the possibility of advancements, additional information or modification which might resolve any present inconsistencies. The second objection actually places a difficult responsibility on the naturalist who raises it, to provide some non-prejudicial standard by which to judge the mental or moral competence of the critic. Should this be provided in any case, the critic will be able to be measured for this supposed shortcoming, and the validity of the Argument from Moral Experience will depend on the results of that test. (If the standard of measurement itself is disputed, then determining the validity of the critic's

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[44]See II.C.3a.

argument will have to await the outcome of *that* dispute). The third objection a naturalist might offer to the Argument from Moral Experience is met if the critic's use of the argument includes a precise demonstration of the elements of the naturalist's theory that are called into question by the lack of the proposed commonality. This will serve to quantify the reliance of the naturalist's theory on the particular points that the critic is calling into question. The fourth potential objection is met if the critic's argument is admitted to be valid whenever presented within the foregoing guidelines, and so a particular number of people do not have to dissent in order for the argument to be valid. However, at the same time, any particular presentation of the Argument from Moral Experience requires discussion on the matter in order to be decisive, rather than being a peremptory statement of fact. As long as the critic of naturalism adheres to these stipulations and presents arguments in this way, the Argument from Moral Experience is not undermined by any of the objections listed in the beginning of this section.

b. *The Argument from Moral Experience as a proposed strategy for critique of synthetic naturalism*

To the extent that synthetic naturalism relies on claims that moral agents possess certain commonalities in the way they experience morality or hold the nature of morality to be, the general form of argument in the foregoing section can be employed in critique of synthetic naturalism. The Argument from Moral Experience can be used to assess the validity of these claims to commonality, within the guidelines and limitations outlined above in the responses to the four kinds of objections. The ethical critique of Michael Ruse's naturalistic theory in the last chapter shows that this kind of argument does have utility with respect to at least some synthetically naturalistic theories, and the connection made in this chapter between Ruse's ideas and the 'causal theory of reference' held by other synthetic naturalists

suggests that this kind of argument may actually have wide applicability within the meta-ethical category of synthetic naturalism.[45]

Even though Arguments from Moral Experience, concentrating as they do on claims to commonality among moral agents, have a wide theoretical applicability within contemporary naturalist meta-ethics, this does not license a general prediction here of the results of that application. No foretelling of the fate of synthetic naturalism one way or the other just because of the relevance of this strategy of critique can be done without begging the question. As was stated in the response to objection 1 above, and as is implicit in the many pages of analysis and critique that were necessary with regard to Michael Ruse's particular theory, this kind of argument must be applied to each different theory, and prospects for an inductive generalisation regarding the validity or otherwise of synthetic naturalism are limited by the fact that there are many different claims which naturalists might make to having found commonalities in the moral experience of people. By way of analogy, G. E. Moore went so far with respect to his own argument against *semantic* naturalism, to say that if one 'will try this experiment with each suggested definition in succession, he may become expert enough to recognise that in every case' the argument renders the semantic naturalist theory implausible.[46] Although his argument, or contemporary reformulation of it, has been successful with respect to semantic naturalism in general, which might seemingly vindicate Moore's inductive leap, many critics have come to agree that such prediction was improper.[47] It is therefore widely believed now that Moore should have restricted himself to the more modest claim that his argument was *applicable to*, rather than *a refutation of*, semantic naturalism in general. Whether application of the argument would refute all theories to which it

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[45]See A.1c.
[46]Moore (1903), 16.
[47]See II.C.3a.

was applied, should have been left to be decided by the application of the argument to particular theories.[48] Accordingly, only the more modest claim is made here regarding the presently proposed strategy of critique of *synthetic* naturalist theories of ethics.[49] What can be said at this point is that the peculiarities of synthetic naturalism are such that the Argument from Moral Experience is well suited to critique of this kind of ethical theory. This has been shown both in general (by means of a significant common thread among prominent synthetic naturalists, a thread which the argument targets),[50] and in a specific case (Michael Ruse's evolutionary naturalism).[51]

B. Conclusion

The point just made forms the final premise in a single line of reasoning throughout this thesis. This line supports the point that by means of only one precise way of defining and subdividing *naturalism* can that approach to ethics be understood sufficiently to place historical and contemporary critique of it in correct perspective, to explain and demarcate the current surge of interest in naturalism, and to suggest an appropriate way forward for critique. In this section an explanation will be rendered of how the present project has yielded the above conclusion.

Naturalism as an approach to ethics has been criticised adamantly from different perspectives in the history of philosophy.[52] Moreover, the two most common and significant kinds of criticisms have survived to the

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[48]Moore's contribution in *Principia Ethica* was application to the theories of Herbert Spencer and Henry Sidgwick.
[49]For more on this point, see II.E.Intro.
[50]See A.1.
[51]III.D.2.
[52]Introduction.B., II.B-C.

end of the twentieth century (with clarification and/or modification) and are consistently able to withstand attempts of naturalist moral philosophers to undermine them.[53] Accordingly, each of these two significant kinds of criticisms has been commonly claimed to render naturalism invalid as an approach to ethics.[54] Naturalism in ethics, however, far from experiencing a dearth of popularity in contemporary moral philosophy, has rather enjoyed a rejuvenation of interest.[55]

One might simply see this situation as a paradox in contemporary meta-ethics, but this characterisation fails upon closer analysis of the documented criticisms of naturalism. The first of the two types of criticisms concentrates on demonstrating the invalidity of a particular claim which is often used by naturalists to support their theories: namely, that premises consisting of nonmoral terms can be used logically to derive conclusions containing moral terms.[56] The second type of criticism concentrates on demonstrating the invalidity of a different claim, which is also commonly used by naturalists in support of their theories: that moral terms can be defined, or their meanings exhaustively expressed, using solely nonmoral terms.[57] Moreover, the current naturalistic trend in moral philosophy does not depend on either of these statements explicitly[58] or implicitly.[59] In fact, most contemporary naturalists are united with the critics of naturalism in rejecting the two statements.[60] Instead, these naturalists defend the statement that the results of enquiry into facts or actual states of affairs are necessary and sufficient to explain the principles, properties and terms used in moral experience and moral discourse.[61] Therefore the situation with

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[53] II.B.2, C.3-4.
[54] ibid.
[55] II.D.1-2.
[56] For the claim, I.B.1; for the critique, II.B.
[57] For the claim, I.B.2; for the critique, II.C.
[58] II.C.4c-5.
[59] I.C.
[60] II.B.3 and II.C.4c-5, respectively.
[61] I.B.3, II.D.1-2.

naturalism is not a paradox; rather, three distinct viewpoints are being considered 'naturalism' in various contexts.

That there are three different naturalisms does not follow from this set of circumstances; seeing naturalism in this way is a confusion.[62] The three statements defended by respective groups of naturalists (and denounced by respective groups of critics) correspond to levels on which naturalism can be justified: the *logical*, *semantic*, and *synthetic*.[63] The logical relation between these is such that the second can be true even if the first is false, and the third can be true even if the first two are both false.[64] Once this is realised, the apparent paradoxes, and any confusion surrounding the relevance of the two main lines of historical criticism of naturalism, disappear. Naturalism is a single meta-ethical position, with a workable definition agreeable to naturalists regardless of the level of justification they choose.[65] However, the level of justification chosen determines what types of criticisms are appropriate for the naturalist. A *logical naturalist* is susceptible to the first (logical) line of criticism of naturalism; a *semantic naturalist* is susceptible to the second (semantic) line of criticism of naturalism.[66] These two are not interchangeable, and here lies the distinction between the two historical lines of criticism of naturalism (attributed often to David Hume and G. E. Moore respectively), and the reason for the limited applicability of each.

Here lies also the support and explanation for the fact that the third, synthetic, level of justification is not susceptible to either line of historical criticism, for these target the logical and semantic levels and the synthetic is independent from them.[67] This justifies the current rejuvenation of interest

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[62] I.B.1a, 2a, 3a; and also II.A.
[63] ibid.
[64] I.C.
[65] Introduction.A, I.A.
[66] II.B and C respectively.
[67] II.C.5.

in naturalism despite those criticisms, and calls for a new and different kind of critique levelled at this third level of justification specifically.[68]

A form of critique of naturalism tailored specifically to the synthetic level can be developed if this understanding of naturalism is reached. The synthetic level of justifying naturalism involves a reliance on scientific enquiry (to a greater extent than did either of the other levels) as well as moral philosophy.[69] This provides a starting point for development of a method of critique. Additional progress can be made by using a case-study approach with an eye to developing a generalisable strategy of critical analysis-- i.e., a strategy that is not limited to the peculiar assertions of one theorist, but has wide applicability within the camp of synthetic naturalism. For instance, Michael Ruse defends his currently influential synthetic naturalist theory on the basis of claims that moral agents in general share certain views about and within morality.[70] Detailed criticism of these claims raises doubts as to their validity, and therefore to the validity of the ethical theory which arises from them.[71] When the potential for generalisation of this type of argument within synthetic naturalism is explored, the kind of claims that Ruse makes is found to be very common in synthetic naturalism.[72] The reason for this is that inherent in synthetic naturalism is a rejection of the importance of the analytical tradition of semantics in determining the reference for moral terms. Many, perhaps most, synthetic naturalists have replaced this type of semantics with another, the 'causal theory of reference'.[73] For its utility in ethics, this approach depends on precisely the kinds of commonalities among moral agents that can be examined by the type of argument used with regard to Michael Ruse's

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[68]II.E. For examples of some recent attempts at this, see II.D.3.
[69]II.E, III.D.Intro.
[70]III.C-D, theme encapsulated in D.2c.iv.
[71]III.D, results summarised in E.
[72]IV.A.1.
[73]IV.A.1a

theory.[74] Therefore, testing synthetic naturalists' claims to commonality among people's moral experience and/or moral language is an appropriate way forward for critique of naturalism.[75] Furthermore, this way forward can only be seen in the light of the logical/semantic/synthetic distinction applied to naturalism, the conceptual difference between these levels and the definition of naturalism *per se*, and accordingly the scope and limitations of past critique of naturalism, all of which elaborated earlier.

Hence, in the contemporary situation where naturalism is very popular and yet extremely variously understood,[76] only by subdividing naturalism into logical, semantic, and synthetic levels of justification, and by defining it separately from these levels of justification (most commonly in terms of 'science', as has been done here[77]) can three particular advancements be made in contemporary meta-ethics. First, historical and contemporary critique of naturalism can be placed in correct perspective; second, the current surge of interest in naturalism can be explained and demarcated; and third, an appropriate way forward for critique of naturalism can be outlined. The need to clarify and make advancement in each of these three areas has been shown to be significant in recent years. Inadequacies and ambiguities in the meta-ethical literature have been pointed out regarding the definition and subdivision of naturalism,[78] the understanding of criticisms,[79] and the explanation of the current surge of interest and appropriate ways forward for critical examination of it.[80] The point here is that all of these problems, as well as others,[81] can be overcome if naturalism is understood in a certain way, and analysed accordingly.

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[74] IV.A.1c.
[75] IV.A.2; specifically with regard to Ruse, see III.D.2c.iv.
[76] Introduction.A, and II.E.2.
[77] Introduction, and I.A.
[78] Introduction.A, and I.B.3a.
[79] Introduction.B, and II.A.
[80] Much of chapter II deals with this; see, e.g., C.5c, E.
[81] Three more examples: the common problem of confusing the naturalist claim itself with the level on which support is provided for it (see I.B.1a, 2a), that of using the term

'naturalistic fallacy' indiscriminately to refer to both Hume's and Moore's arguments as if they were the same (see II.B.1, C.2c), and failing to recognise and/or deal with the particular epistemological presuppositions of Moore's Open Question Argument (which has not received remark in this conclusion but was dealt with in II.C.2b).

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